

◆ THE GENESIS PLAN ◆



HYDROTHERAPY

The prefix ‘Hydro’ comes from the Greek language and it means water, Therapy means the treatment of disease. The true definition is the external use of water in restoring health.

“The skin is connected to every organ in the body via the nervous system and circulatory system. By changing the skin temperature with water applications that are hot or cold, nerve sensation will stimulate or sedate specific organs. Raising and lowering temperature of the body will help break up congestion and facilitate elimination or circulation.”-Humbart Santillo ND.

TEMPERATURE RANGES, DURATION & EFFECTS

TEMPERATURE	DURATION	EFFECT
Very Cold 32-43°	a few seconds only under supervision	Tonic
Cold 40-60°	30 sec. -2 minutes	Tonic, Shocks nervous system
Cold 60-72°	30 sec.- 3 minutes	Invigoration; improves circulation
Tepid. 80-90°	5-7 minutes	Cleanses; lowers fever, cools inflammations
Neutral. 92-95°	30-60 minutes	Refreshes, aids burns
Warm, 90-100°	15-30 minutes	Equalizes circulation; reduces pain; softens skin
Hot, 100-105°	8-10 minutes	Relieves pain; aids neuritis, rheumatism, and skin eruptions
Very Hot. 105-110°	A few seconds to a few minutes	Relaxes; reduces muscle pain/spasms; dilates blood vessels; raises blood pressure

RULES FOR HYDROTHERAPY

- 1 Always ask God’s blessing on the treatment.
- 2 Always use a thermometer to test the water temperature- never guess! The results depend on proper temperature!
- 3 Do not use extreme temperatures on elderly, debilitated or nervous people. Between 80-102° is usual.
- 4 Always wait 2-4 hours after meals before water treatments.
- 5 Cold baths 50-60° should always be of short duration. Cold packs, or fomentations, used for specific areas can be used more often and for longer if the patients condition allows.
- 6 If patient is chilly, rub until warm, otherwise no drying is necessary, dress wet and go to bed.
- 7 If weakness is felt after treatment, rest at least 45 minutes. Otherwise exercise slightly if indicated.
- 8 Avoid extreme temperatures during menstruation. A good range is 98-102° Fahrenheit.
- 9 Sick rooms should be ventilated but avoid drafts.

Hydrotherapy-

(Hydro-thermo-therapy) [water-heat-therapy]

PHYSICAL PROPERTIES OF WATER-

1. The ability of water to communicate and absorb large quantities of heat by contact.

A pound of water can store many times the amount of heat stored by a pound of any other substance. EG. 30 times as much as mercury.

a. Specific heat- These large amounts of heat taken on by water, do not greatly change its temperature. This high specific heat of water makes it especially valuable in applying heat to the body.

Conversely, a pound of cold water can absorb 30 times as much heat from the body as any other substance. This heat exchange occurs readily with anything the water comes in contact with.

a. Latent heat- water, in freezing, gives off nearly 80 times as much heat as it did before freezing and in thawing absorbs 79.2 degrees C with no change in the thermometer. This is latent heat. Latent heat of boiling is 537 calories- when steam condenses it gives off this heat. This explains why steam can cause such severe burns.

2. The intensity of temperature impressions obtained by the use of water. The difference between the temperature of the skin surface and the water is what creates a thermic impression. If the skin is cold, a warm compress will feel hot, while if skin is hot a tepid compress will feel painfully cold.

3. The perfect fluidity of water, rendering it efficient in applying mechanical stimuli. When mechanical stimuli are applied with the water, as in cold mitten friction, the effect is greater than either the friction or the water alone. Percussion sprays and forceful showers intensify effects.

4. Its properties as a solvent and its use in nutritive changes. As water is almost a universal solvent, it works both internally, (drinking water, enemas and douches) and externally, (Cleansing baths and soaks) to remove toxic and waste products from the body.

--Free water drinking is essential to health, with control of blood pressure, gas exchange in cells, removal of wastes, and mobilization of nutrients all being dependent on adequate water.

-BASIC HYDROTHERAPY METHODS-

A. Hydrotherapy is not magic. Hydrotherapy is based on scientific principles.

B. Heat brings circulation to a given area.

C. Cold drives circulation away from a given area.

Think! - Watch the contraindications very carefully. Never treat if you are in doubt as to whether the patient can tolerate the physical strain or shock of the treatment. Always remember to ask the patient for a **full** medical history before agreeing to proceed with any type of treatment. Don't be afraid to ask for assistance from someone who has had more experience. It's a splendid idea if you can find a medical professional who can give you a bit of tutoring and or back up. They will not mind helping you if you prove to be a reliable person and not overly adventurous type.

Do not attempt to treat the following patients unless you either have had considerable prior experience or have the supervision of someone who has:

- #1 Heart patients
- #2 Diabetics
- #3 Pregnant patients
- #4 Drug addicted patients
- #5 Cancer patients

Special Note: It is important to understand before you begin the treatments to know at what rate of pulse that you will need to "bail out". The following rule should be a safe guide for you to follow in determining the upper limit for your patient:

$$220 - (\text{patient's age}) \times .75 = \text{upper pulse limit.}$$

Note: All information contained herein should be understood as educational information and not direct medical advice. Proceed at your own risk.

Artificial-Fever therapy: Option #I. Full immersion bath

- Indications:
- A. Viral or bacterial infection
 - B. Cold or flu
 - C. Run down physical condition
 - D. Need for immediate, immune stimulation

- Contraindications:
- A. significant hypertension
 - B. Diabetes
 - C. Heart disease, circulatory or vascular disorder.

Cautions: This therapy cannot be used without caution on severely debilitated or very elderly patients. If you choose to use this therapy option do not elevate body temperature to the same levels that you would on stronger and younger patients. If faintness occurs cool water down (don't shock patient with cold) and discontinue treatment.

Procedure:

Step #1 Take patients pulse. Check patient's body temperature

Step #2 Fill bath with water that is as hot as patient can comfortably tolerate. You will find that most will be able to tolerate water temperatures between 107 degrees F and 110 degrees F. The hotter the initial water temperature is the more rapidly the patients body temperature will begin to elevate toward the goal temperature. If the water is too cool from the start the body will be able to regulate and maintain a normal temperature. Have patient get into the bath being as fully immersed as possible, **except for the head and upper neck.** Cover any exposed body parts (like knees, legs, etc.) with a blanket or towel.

Step #3 After allowing the patient a minute or two to adjust to the bath take the patients pulse. Remember to check pulse every 5 minutes.

Step #4 Dip a large towel in a bucket of iced water, wring it out so that it isn't dripping dramatically. Place the slightly rolled towel around the patients neck. Allow a significant portion of the towel to contact the back and top of the head. You may find it

easier to use two towels instead of one for this job. Bathe the exposed areas of the head and face frequently with smaller cold towel. **It is very important to keep the head and first few inches of the spinal column cool. You will need to change this cold towel frequently during the procedure. If you don't, cooked brain is the result!**

- Step #5 Check body temperature every 5 minutes. After the body temperature elevated to a temperature between 102 and 104, start your timer. Allow the patient's body temperature to remain constant for between 10 and 30 minutes. You will have to determine the duration by factoring in the patient's physical condition, and the temperature required to aid in defeating the patients condition.
- Step #6 Add cool water to the tub until the patient feels a noticeable difference in the water temperature. The patient's body temperature should now begin to go down slowly. Adjust the descent in body temperature by adding cool water. It will normally take about 10 minutes to drop down about 2 degrees F. Take care not to chill patient.
- Step #7 Assist the patient out of the tub. You now have several options. You have patient take a gentle contrasting hot and cold shower or you may simply have them lie down and sponge them off with a cool well rung towel. Dry patient and have them lie down for at least 30 minutes.

Special notes: You may wish to have the patient sip cool liquids during bath but it may make it hard to take their temperature by cooling the oral tissues. The patient will actually be warmer than the thermometer reads. It works better to wait until the temperature has reached a plateau and you are only maintaining the temperature. If you have a digital thermometer that works in the ear you will have an easier time. At any that your patient feels dizzy, faint, or the heart rate exceeds safe limits begin the cool down phase **immediately**.

Artificial Fever therapy: Option # 2. (Hot towel method)

Indications: Same as option #1

Contraindications: same as option #1

Cautions: Same as option #1

Procedure:

- Step #1 Take patient's temperature. Check patients pulse.
- Step #2 Place patient on bed or table in sitting position. Take hot, well rung-out towel and fold it until it is about 5 inches wide and long enough to run the full length of the spine. Place a single thickness of dry towel- over top of the hot, wet towel and have the patient lay back on the towel. You will have to help aim them as the lay back. This towel will not have to be changed during the procedure. Patient should have the hot towel running the full length of the spine except for the upper cervical area.
- Step #3 Place a dry towel on the patients bare chest. Cover this with a thick hot towel pack. **Note:**

make sure that you don't burn the patient. Place your hands under the towel to determine if it is too hot.

- Step #4 Cover patient with a blanket
- Step #5 Place patient's feet in a large kettle or bucket of hot water. Water temperature should be between 107-110 degrees F.
- Step #6 Keep taking the temp. and checking the pulse every 5 minutes during the procedure. Place cool towel around patient's neck and head. Keep sponging the face frequently. The cool towel pack will have to be replaced quite frequently throughout the procedure.
- Step #7 Change the hot towel packs on the chest every time they cool down. Once patient's body temperature has reached the desired range maintain by changing the towel packs on the chest and adding hot water to the feet. Use care not to spill hot water directly on the feet. Remember: Patients with diabetes cannot tolerate this therapy.
- Step #8 When patient's body temperature has been elevated to the proper level for 10 to 30 minutes you may remove the hot towel packs. Allow patient to rest for about 5 minutes.
- Step #9 Lift patients feet from container and pour cool water over them. They probably will protest!
- Step #10 Quickly sponge patient's body to cool and remove perspiration. Let patient to lie covered and rest for at least 30 minutes.

Hot foot bath:

- Indications:
- A. Cold or flu
 - B. Sinus congestion
 - C. Chills
 - D. Pelvic congestion
 - E. Headache
 - F. Nose bleed
 - G. Stress

- Contraindications-
- A. Diabetes
 - B. Numbness in feet
 - C. Limited circulation

Procedure:

- Step #1 Fill a large kettle or bucket 3/4 full of hot water. Water temp. should be between 104 and 108 degrees F. Have patient place feet into water slowly. Put your hands into the water first to determine if patient will be able to tolerate the temperature. It is desirable for the water to cover the feet and part of the way up both legs. Your patient may either be sitting down or lying down for this treatment. Cover the container and the patients feet and legs with a blanket during procedure. In

cool weather it is advisable to cover the whole body.

- Step #2 Add hot water as needed to elevate the water temp. upward near 110 degrees F. You will need to wait a few minutes before this step to allow patient to get used to the initial heat. Remove patient's feet from bath when adding hot water.
- Step #3 Cool the patients head and face as needed with a cool wet towel.
- Step #4 Maintain bath temp. for 15 to 30 minutes.
- Step #5 Remove patient's feet from bath and pour cool water over them. Dry feet thoroughly. Sponge or dry accumulated perspiration from other parts of the body. It is recommended for patient to remain inactive for 30 minutes after treatment.

Steam Bath

- Indications:
- A. Depression
 - B. Arthritis
 - C. Cold
 - D. Onset of flu
 - E. Low immune system
 - F. Systemic impurity or toxicity (not chemical poisoning)

- Contraindications:
- A. Diabetes
 - B. Hypertension
 - C. Irregular heart rate
 - D. Occluded arteries
 - E. Poison ivy, oak, & sumac

Procedure: This procedure for those who do not have a permanent steam bath.

- Step #1 Place a electric skillet, deep fat fryer, or hot plate with 1 qt. of water under a chair. An old wooden chair with out metal or upholstery works best. Once the heat source is hot have patient sit on chair. Patient should be only wearing a bathing spit at most. Cover patient's entire body, (except the head,) and chair with an old shower curtain, or heavy blanket. You want to ensure that you have trapped all the heat under the covering but use caution not to allow the covering to come in contact with the heat source.
- Step #2 Place a towel or other cloth around the patient's neck to prevent the Steam from escaping the enclosure. Take patient's pulse.
- Step #3 When patient has reached the point that they feel that they are unable to remain in the bath any longer you will have two options:

Option A. Take patient out and either sponge them off quickly, or spray them off in the shower with cool water. Dry and cover them for 15 minutes,

Option B. Have patient take a quick cool contrast shower and have them get back into the steam bath. for another rotation

- Step #4 Have patient take the desired number of steam/cool contrasts and then after the

last cool contrast dry patient and have them lie covered for at 15 minutes. It is desirable to do three rotations before terminating.

If patient is strong they may wish to do up to 5 rotations. These rotations are wonderful to stimulate the immune system.

Note: You should check patients pulse frequently throughout the procedure. typically the rotations run for about 10 minutes hot & 30 seconds cool for most patients. Some will be different than others. You can help patient to sweat faster by giving them a hot drink before starting. You may give them something cool to drink during the procedure. The sweat will give the patient the sensation that their skin is crawling.

Hot & cold contrast soaks:

Indications: A. Inflammation
B. Infection
C. Arthritis
D. Swelling
E. Need to speed healing of injury.

Contraindications: A. Diabetes
B. Circulatory disorder
C. Bleeding

Procedure:

Step #1 Fill one container with hot water- 105-110 degrees F.
Fill one container with cold water.

Step #2 Alternate placing the affected body part first in the hot and then in the cold. Leave in the hot water for 3 minutes and then transfer to the cold for 30 seconds or a little longer.

Step #3 Continue rotations until 20 minutes have passed. You may go longer for greater effect.

Step #4 End procedure with cold for all conditions except arthritis. Dry and cover.

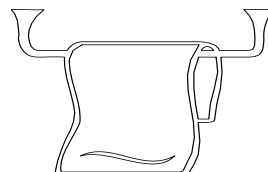
Note: In cases of infections and open wounds use a disinfectant solution or a strong decoction of White oak bark in the containers with the water.

Local fomentation:

(combine with hot foot bath for greater effect)

Indications: A. Local pain
B. Inflammation
C. Muscle spasm
D. Congestion

Contraindications: A. Pelvic congestion
B. Non-metastasized malignancy
C. Bleeding



- D. Loss of consciousness
- E. Ulcers
- F. Appendicitis
- G. Varicosity

Procedure:

- Step #1 Uncover the body area to treat. In cases where you are treating a large part like the chest, have patient lie down.
- Step #2 Place a dry towel over the area to treat. Now place a hot towel pack on area and quickly cover the patient with a blanket. It is important to place your hands under the dry towel for a little while to determine if the pack is too hot or too cool. Don't bum the patient!
- Step #3 Check patients pulse. Check every 5 minutes during treatment.
- Step #4 Keep packs hot change frequently as needed.
- Step #5 Remove hot pack after 5 minutes and apply cold towel directly on skin. Leave on for 1 minute.
- Step #6 Remove cold pack and replace fresh hot pack. Don't forget to replace dry protecting towel before replacing hot towel pack.
- Step #7 Continue procedure until 30 minutes has elapsed. Finish with cold pack and dry area. Keep patient covered until circulation returns to normal. Don't let patient get chilled. Patient should stay in where it is warm for at least 30 minutes before going into a cooler environment. Patient should remain adequately covered. If there is any post treatment perspiration, make sure to dry it before patient has a chance to get chilled.

Cold Compress:

- Indications:
- A. Swelling
 - B. Inflammation
 - C. Infection
 - D. Sore throat
 - E. Bronchitis

- Contraindications:
- A. Patient who is cold
 - B. Open sores
 - C. Disease of skin surface.
- (these will spread if wet or damp)

Procedure:

- Step #1 Take cloth of appropriate size and dip in cold water. Cloth should be made of cotton. Wring out cloth. If it is of a thin material you should double it before application. Apply snugly but not tightly to skin.
- Step #2 Hold in place and cover with a thick wool cloth that will cover the entire cotton

cloth and perhaps a little more. Fasten securely. Make certain that it isn't tight or it will interfere with circulation.

Step #3 Leave on for at least 4 hours. Most will work great if you apply them at bed time and remove them in the morning.

Step #4 Remove compress and sponge area with cool water and then dry.

Note: There are a lot of ways to accomplish this and a lot of applications as well.

Examples: Use a doubled handkerchief covered with a wool sock for a sore throat. Use a larger piece of cotton cloth covered by a similar sized wool cloth for an inflamed or arthritic knee. For bronchitis try using a cotton T-shirt covered by a wool sweater.

Explanation: The cool of the wet fabric on the skin will first force the blood away from the area. The body will begin to compensate by bringing new circulation to the area in attempt to warm the area. The wet cloth will then continue to gradually dry out. As it dries it will evaporate the moisture in the compress and this will continue to cool. the body will be persistent and continue to bring new supplies of healing blood the area.

Cold mitten friction:

Indications: A. Overall weakness
B. Low immune system
C. Poor total body circulation

Contraindication: A. Open sores or lesions.
B. Burns
C. Poison ivy etc.
D. Chills

Procedure:

Step #1 Have patient remove clothing. Cover patient with sheets or blanket,

Step #2 Take two special terry cloth mittens and dip them in cold water.
Wring them out.

Step #3 Starting with one limb at a time briskly rub the limb with both mittens starting at the extreme end and work toward the main body trunk.

Step #4 Dry the limb and cover it before exposing the next.

Step #5 Repeat until all four limbs are treated.

Step #6 Treat chest and then back drying and covering each.

Step #7 Have patient rest for 1/2 hour.

Note: You may wish to use the hot foot bath in combination with this treatment. Advisable in cold weather or with weak patients. This treatment may be use in combination with fever therapy, fomentation, and steam bath. It could be used to end these treatments as an alternative to their regular ending procedure.

Ice massage

Indications- A. Inflamed or swollen muscle
B. Joint injury

Contraindications: A. Muscle spasm
B. Arthritic joint pain

Procedure:

Step #1 Slowly rub a small block of ice or a firmly packed ice bag (prefer block) over the affected area. Don't leave in one spot so long as to freeze any tissue. Continue to massage the area with the block until the area begins to feel numb.

Step #2 Replace clothing and allow 15 minutes to pass before stressing the area.

Contrast Shower:

Indications: A. Low immune system
B. Fatigue
Poor overall circulation

Contraindication: A. Advanced heart disease
B. Advanced diabetes
C. Dizziness or weakness
D. Severe headache

Procedure:

Step #1 Assist patient in taking a moderately hot shower. Let patient warm up.

Step #2 Have patient switch water over to cool for 15 - 30 seconds and then return to hot until patient begins to feel hot again.

Step #3 Continue rotations until 3 to 5 rotations have been accomplished.

Step #4 Have the patient end with the cold part of the last rotation.

Step #5 Dry patient quickly and have patient lie down and keep covered for 15-30 minutes.

Note: Most patients will be able to make the contrasts between hot and cold a little more pronounced with each rotation. There really is no easy way to monitor pulse or body temp. during this treatment. Stay right with patient and talk to them. If at any time they begin to feel "funny" begin immediately to gently cool them down. Don't use cold to do this. If Patient has cool water to drink before treatment, problems are rare. If you use your head and don't do anything severe all should go well.

Therapeutic Guidelines courtesy of Rob Mc Clintock ND -Healing Leaves Ministry.

Understanding Fevers-

Causes- waste products and/or bacterial toxins present in the body- causing the body to attempt to oxidize them (burn them up) These are nitrogenous compounds and highly poisonous.

Manifestations of fever-

1. Various nervous disturbances, such as malaise, headache, backache, insomnia, delirium etc.
2. Chilliness
3. Hot, dry or cold clammy skin
4. Increased pulse rate and tension
5. Excessive thirst
6. Loss of appetite, foul breath, coated tongue
7. Constipation or diarrhea
8. Urine scanty, highly colored with increase of solids

Aims in fever treatment-

1. Increase the germ destroying power of the white blood cells-
2. Increase oxidation and elimination of toxins-
3. Conserve and assist the body powers, such as heart action, circulation, digestion, etc. during the fever-
4. Relieve distressing symptoms, especially nervous symptoms-
5. Prevent undue accumulation of heat within the body.

All these objectives are met with hydrotherapy properly applied.

Two Types of fever-

1. caused by increased heat production

- Full pulse and flushed face,
- Hot, dry skin
- Warm, moist skin

Indications- Increase heat loss by long contact with cold.

Treatment- Long, cold applications.

1. caused by decreased heat elimination

- Cold skin, whether dry, moist or clammy
- Cyanosis
- Goose-flesh
- Chilly sensation
- Shivering

Indications- Warm the skin, combat internal congestion.

Treatment- Hot applications until the blood is brought back to the skin.

Cold applications-useful in fever-

1. Cold bath
2. Graduated bath with friction
3. Tepid or cool bath
4. Evaporation wet sheet pack
5. Cold sponging
6. Cold to head and neck
7. Ice-bag or cold compress to heart
8. Cold compress
9. Cold rectal irrigation or enema
10. Cold water drinking
11. Fresh cold air in the sick room

Hot applications- useful in fever- or preparatory to cold treatment-

1. Hot blanket pack
2. Very short hot bath or repeated hot sponging
3. Hot evaporating sheet

4. Fomentation to abdomen
5. Fomentation to spine
6. Hot water drinking
7. Cold mitten friction (reaction simulates a hot application)

IMPORTANT-

Be sure to apply cold compresses to head and neck in high fevers before placing in cold bath or applying cold pack to prevent increased blood rushing to brain with the cold body treatment.

Make sure to use friction and such to keep skin ruddy thereby reducing internal congestion, aiding oxidation and heat elimination. This also prevents vascular paralysis and supports the heart.

Do not apply cold treatment if feet are not warm or if patient is chilled.

Applications of cold

1. Prolonged- direct antipyretic by extracting more heat than is produced.
2. Short-stimulate heat production as much or more than they increase heat loss.

Applications of Hot

1. Prolonged- antipyretic by increasing heat elimination through profuse sweating.
2. Short- prepares the body for cold applications.

Examples-

The cold-rubbing bath-

This is an example of the prolonged cold application. It causes a decided increase in heat production. Oxidation of toxins and poisons is greatly heightened. At the same time continuous contact with the cold water causes a greater amount of heat to be carried away from the body than the extra heat produced during the bath, and so temperature is lowered. This is brought about by the rubbing which keeps the blood in the skin. If reaction fails, heat elimination is checked and the bath ceases to be beneficial. Long cold applications are indicated in long-continued weakening fevers such as typhoid, typhus, and hyperpyrexia.

Cold mitten friction

This is an example of short cold applications. It stimulates the circulation, increases blood pressure, and augments heat production. But the contact with the water is of too brief a time to carry away much heat. The temperature may stay the same, rise or lower slightly. It is indicated in short fevers such as colds, flues,

Or when the skin is cold for the purpose of warming the skin and reducing internal congestion.

Sweating treatments-

Example of long hot applications. By producing free perspiration the elimination of heat is greatly increased. Temperature first rises then lowers as sweating becomes well established. In fevers where heat production is high it is impossible to lower temperature by sweating alone. This may be used for colds, flu, coryza etc.