Good afternoon, dear colleagues.

Thank you very much for your presence today. I thank the organizers of the webinars and the translators. Thank you to Marian Dunlea for inviting me to share today's space and the topic of healing body practices with her.

I would like to share with you my interest in Cold Water Swimming, or as it is also called Cold Dipping or Walrusing.

Personally, I like to name it in Ukrainian "Zymne kupannia", because of meaning "Zymne" in the Ukrainian language "cold" and "frosty", and at the same time - its origin came from the word "zyma". It means "a winter" in Ukrainian. I like the association with the season when part of the planet is covered with snow and ice to rest and recover for the next life cycle. In addition, cold swimming is a sport, and what I want to talk about today is more similar to dipping or simple swimming. I also practice Cold Water Swimming.

Cold water swimming is a stay in the sea, river, lake in the cold season or in summer, but in water with a temperature below 15°C.

The thermoneutral temperature of water for resting naked is approximately ~35°C, so a person may experience a decrease in core body temperature when immersed in water at a lower temperature. The appropriate temperature for training for long-distance swims is ~25°Celsius. The colder the water temperature, the shorter the time spent in it. In most cases, I will talk about water temperatures of 10-15°C.

Unfortunately, we won't be able to do any practical exercises, so I'm going to offer you a short video to watch. Those of you who have experience of Cold Water Swimming can recall it in detail, and those who are not familiar with it will get an image to join in.

#### **VIDEO**

# The unique healing effect of Cold Water Swimming and hypothermia from the point of view of science

Cold Water Swimming is a bodily practice of attention, which develops adaptive capacities, strengthens the immune system, and self-regulates the central nervous system, including research and experience in helping with depression, bipolar disorder, Alzheimer's disease, and more.

Cold Water Swimming has a healing effect on the human body. I was most interested in the nature of its effect on the psyche.

Thanks to the rules of Cold Water Swimming, the process of hypothermia, when limited to a safe level, can be beneficial to a person. Hypothermia is lowering the body temperature. I am going to focus on three main points caused by hypothermia. Redistribution of blood circulation and renewal at the cellular level.

Cold Shock proteins

Cold Shock hormones

Blood flows inside the body to the heart, brain and internal organs, which increases the activity of mitochondria - activates metabolic and regenerative processes at the cellular level, as well as dilation and narrowing of blood vessels At a water temperature of 10-15 °C, after 3 minutes, the blood flows from the internal organs to the skin. At this point, a person feels warm.

#### **Cold Shock proteins**

Not so long ago, scientists found cold shock proteins in the human body, which are produced by the body only when immersed in cold water. If you just do exercises in the snow or douse yourself with water, the proteins are not produced.

The appearance of cold shock proteins triggers the process of restoring connections between neurons.

Cold-inducible proteins are directly involved in regeneration in reptiles.

These are evolutionary conserved proteins CIRBP and RBM3, which are released in mammalian cells when the temperature drops to 32°C, which is comfortable for reptiles.

RBM3 triggers the formation of new synapses - new neural connections - and regenerates nerve fibres damaged, for example, by Alzheimer's disease.

#### Cold Shock hormones.

Also, during winter swimming, a certain list of hormones is released, also called cold shock hormones. The process of their appearance is interconnected with feelings. Water of an "uncomfortable" temperature stimulates an additional release of a cocktail of hormones (endorphins and corticosteroids, adrenaline, testosterone and estrogen, serotonin).

The appearance of cold shock hormones causes tension and then relaxation of the vagal nervous system and the vagus nerve.

You're probably familiar with the theory of the vagus nerve, and have heard of the tolerance window and the polyvagal theory of Stephen Porges. I won't dwell on this part, but I'll just briefly say that this vagus nerve is responsible, among other things, for the ability to relax and rest. In a state of constant stress or depression, it is constantly tense and a person cannot relax even during rest. Cold Water Swimming "reboots" the nervous system.

The rules for Cold Water Swimming are quite simple:

- Gradually enter the water because the body and blood vessels must have time to adapt to temperature changes in order not to damage the connectivity of the body and mind.
- Stay in water for about 3 minutes at a water temperature about +12
- Your body has warmed up and it's time to get out of the water
- **Protection**: swimsuit, hat, slippers, gloves. The skin does not feel scratches from ice or stones during cooling, so you need to dress up yourself.

Swimming in a wetsuit is not considered Cold Water Swimming. **Dangerous** 

- Immediately and sharply dive in. The skull is a bone, it does not warm up, so
  the blood vessels in the brain can change too quickly. The body must have
  time to synchronise the activity of the sympathetic and parasympathetic
  nervous systems. A sharp dive can lead to arrhythmias and lung collapse.
- Swim alone
- Stay in the water for a long time after the body has already warmed up (about 3 minutes)
- Staying with a wet head and in wet bathing clothes
- Drinking alcohol to keep warm (among other things, this kills the effect of Winter Bathing)
- Pregnant women and children under two years of age (not recommended)

# A little explanation of why three minutes

The normal body temperature 36

There are several stages of cooling and the third is death. The critical temperature for the human body is 32 degrees. Of course, a person will not die in 4 minutes, but a hypothermic dizzy state can lead to an increased risk of getting into unpleasant or dangerous situations.

Cold shock	First 3 minutes	Hyperventilation tachycardia, respiratory reflex
Short-term	About 3 minutes	Superficial neuromuscular cooling
Long-term	About 30 minutes	Hypothermia, later collapse
complete re	scue collapse	Cardiac arrhythmia, disturbance

So today I'm only looking at superficial neuromuscular cooling.

Before we move on to the perspective of looking at Cold Water Swimming from the perspective of myth and archetypes, I would like to briefly recall something about the **nature of trauma**.

The nature of trauma (PTSD, trauma of sexual abuse, early childhood developmental trauma) at the neuro-physiological level is a traumatised connection and traumatised synchronisation of the interaction of the three main parts of the brain:

- reptilian brain develops in the womb, this part of the brain is responsible for the survival of a child/ person in times of danger or life-threatening situations: fight, flight, freeze, flatter.
- Limbic brain develops after the 8th month and is responsible for emotional maturity, behaviour, control and the ability to create healthy relationships.
- The cortical brain is responsible for learning, language, reflection, morality, information processing, and planning. It develops up to the age of 25.

I would also like to draw your attention to the symbolism of Death and dying that exists in Trauma.

Trauma is the experience of Death, or rather, the near-death experience: a moment of intense tension and mental exertion, after which "everything has changed" (worldview, the person, relationships, etc.). This is a transformation experience, but after it, a person feels painfully separated, cut off, alienated, and not integrated into their own life, world, society, and relationships. It is a trap or a hiding place from real transformation, change, development, life. The experience of leaving the body. When immersed in water during Cold Water Swimming, a strong feeling of fear of death is experienced.

I also want to remind you once again of the following aspects of Trauma:

- In trauma, time stands still.
- Suddenness (affect) appears, and the gradualness and perception of a causeand-effect relationship is lost or distorted.
- Dissociation is the queen of defences in trauma. It is a paradox: what binds or holds the world of Trauma is of the nature of disconnection, or nonconnection.

In principle, we could stop here, I mean, scientific achievements. After all, science is often looking for a direct answer to the question "What to do".

But the fact is that how many minutes it takes for the body to warm up depends on many factors:

age, weight, body fat, water temperature, air temperature, gusts of wind, and simply **individual** factors.

Therefore, *Cold Water Swimming* refers to mindfulness practices or meditations for example, where the focus is on what is happening to the body and the mind or the soul.

## Tracking the process through Feelings and Sensations

Now that you know about the physiology of the process, I want to look at the psychology of the process. During the process of Cold Water Swimming, a person goes through different feelings that can be compared to stages or tracking of the process.

The rules forbid "throwing" your body into the water. And this often comes to mind for beginners - a person wants to "skip" all the frustrating states, to ignore them. But winter bathing has a clear framework, driven by physical and very real reactions or changes in the human body in response to the extreme experience of cold. A framework created by Nature itself.

Tracking is very important because it is an antidote to dissociation.

During the immersion, there are no thoughts in the mind. There is a process of awareness, and thinking thoughts is impossible. There are only feelings and sensations.

# Body and sensations

- Cold air. The freezing. The wind. The tension. Pebbles. Sand.
- The water is scalding cold, dense, pushing, hugging, salty. Algae.
- It is difficult to breathe, chest tightness. Tension. The sky and the water.
- The absence of thoughts. Any thoughts at all. The tension. The sky and the salt water. The force of the waves. Movement. As much movement as possible with the whole body.
- The surface of the skin is not felt. Powerless and yet unexpected relaxation of the chest and whole body.
- Lightness. Deep and full breathing is restored.
- Tingling sensation on the skin. The feeling of pleasure and warmth increases.
- Salt on the skin. Muscle joy. Intense pleasure in existence, strength, energy.
- A sense of the world as a place full of beauty.

# Soul and feelings

- Fear of impudent death, doubt, fear of the unknown, uncertainty. Animal horror on the verge of madness, despair of the inevitable.
- Panic, fuss, shame to give up.
- Rage, anger, struggle, energy.
- Existential loneliness, alienation, sadness.

- Surprise, discovery.
- A sense of pride and power, dissatisfaction with the end.
- Playfulness, fun, laughter and joy.
- Harmony and tranquillity, silence.

## Harmony. Fullness of presence.

The world is beautiful and friendly in any weather, and the human body is light and naturally beautiful. There is so much pleasure that you want to run like in childhood, but no more than you have the strength to do so. Descriptions or explanations are superfluous. The world has everything to make it complete. There is no need to add to the world, no need to take from it.

It is an intense experience of inner completeness, of oneself, of one's presence in the world and of the presence of the world in oneself. The first immersion can create a very intense experience on the verge of sacredness and numinosity.

# The myth reveals through the symbol the nature of the origin of trauma: the feminine, the soul, the nature of feelings, and connectedness.

Reflecting on the wisdom of nature, I wondered where Cold Water Swimming came from, what archetypal energies create harmony and why walruses. I started looking and this is what I found.

Latvia, Lithuania, Estonia, Sweden, Norway, Denmark, Finland, Russia, the UK, Ireland, Germany, Belgium, Switzerland, the Netherlands, China, Canada, America, Alaska, and Greenland have a Cold Water Swimming practice.

The name given to those who practice Cold Water Swimming: polar bears - North America, seals, otters, seals - Finland, Sweden, walruses - Poland, the Netherlands, Russia, Ukraine, seals - in the Baltic States.

Immersion in an ice-hole on Epiphany (the last of the traditional Christmas holidays in Ukraine) is a symbol of rebirth and purification from sin

**Walruses** are those who practice Cold Water Swimming in Ukraine.

This word sounds as Morzh in Ukrainian

Who are Walruses? Etymology of the word/ This word is borrowed from the Sami language - morša. In other European languages, the word could also have entered through the Finnish mursu. From the same sources came the English morse, now obsolete and supplanted by the word walrus, as well as the French morse "walrus".

In Alaska mythology, the walrus is the spirit and master of the sea

Walruses, otters, seals, polar bears are sacred spirits of water that live in two elements: land and sea and combine the characteristics of a dog, a wolf, a cat

In the culture of the northern peoples, the Inuits, there is a fairy tale about Sedna, the sea mother, the ruler of the sea world or the sea woman.

I did not find this fairy tale in the Baltic States, Eastern Europe and Russia, but North America, Scandinavia, the UK and Ireland know it well.

In all countries, the body of the fairy tale does not change:

- Sedna has no mother
- The father/husband is a haunting murderous figure
- The reality of relationships is full of emptiness
- Sedna's death always happens in the same way
- After the death of Sedna, she becomes the Lady of the Underwater World, and the place where the dead souls reside

#### **FAIRY TALE**

An old widower and his daughter Sedna, who was so beautiful that all the Eskimos wanted to marry her, once lived near the Arctic Ocean. But she refused all offers. One day, a seabird came to her in the form of a handsome man and promised her a gentle life in a warm yurt full of bear skins and fish. Sedna flew away with him. But the bird lied. All Sedna found was a stinking nest on an island full of birds, where she ate only raw fish. She regretted her rejection of handsome human men and complained to her father when he visited her. Anguta ("a man with something to cut") put his daughter in a kayak to bring her back to the human world. He stole his wife from Bird. So Bird gave chase, caught up with him and attacked Sedna's father.

They struggled, and when Anguta realised that it was hopeless, he pushed Sedna overboard to drown. For a moment, she managed to grab the edge of the canoe with her frozen fingers, but the old man was so frightened that he hit her hands with his paddle and cut off her fingers. Sedna tried to grab hold of the boat again, but her father cut off her arms at the elbow. When she came up for air for the third time and still managed to grab hold of the boat, her father cut off her forearms and stuck the oar in her eye before she plunged into the icy water.

"I have to do it," my father shouted, overcome with fear, "Bird - your husband is angry with the sea and demands your life.

Sedna's body slowly disappeared under the icy water.

Her fingertips turned into fish, her middle joints into seals, seals and walruses, and her shoulders into whales.

The father returned home to his hut and fell asleep sobbing. At night, a violent storm came and carried the sleeping father into the depths of the sea.

There is also a version according to which the father took Sedna into the boat, but then cursed himself, cursed her, cursed the world, and they both disappeared into the sea. Goddess, the Soul of the Sea

Since then, Sedna has been the Lady of Death and Life, the "Old Food" who feeds people, rules the sea and all marine animals, and controls the weather at sea.

Her domain is Adlivun, a vast kingdom where human souls go after death to serve their life sentences (including her father).

Sedna is ready to provide people with food if they accept her rules. If the laws are broken, then Sedna's hands hurt, and she punishes people with disease, hunger and storms.

To alleviate Sedna's suffering and to appease her spirit, the shaman goes to the land of death and combs Sedna's hair.

## Sedna and other goddesses

The transformation of a woman into a goddess is a widespread narrative that indicates interaction with archetypal energies. Psyche and Ariadne were transformed in the same way, although Sedna belongs to an earlier generation of female goddesses - her image is less differentiated and features of various goddesses or fairy tale characters can be found in her: Kali, Ishtar/Ereshkigal, Hecate, Aphrodite, Baba Yaga, the Handless Girl, Psyche.

Reflecting on the emotional state after bathing and the neurophysiological effect of cold shock, i.e. Harmony, I turned to the myth of Aphrodite. She and Ares are the parents of Harmony.

# **Aphrodite:**

- born from the sea without a mother
- was born as a result of a cut-off
- restoring her virginity by swimming in the sea
- the eternally young and beautiful goddess of love

Sedna lacks a balance between the feminine and the masculine. Sedna gives birth to children through cut-off, unlike Aphrodite. And in Sedna's case, the transition from daughter/wife to mother is instantaneous, and the space measured by time is excluded.

Let us recall **Hecate**, who is a guide through periods of transformation and its dimension of time.

Hecate, the Maiden, the Mother and the Old Woman, is versed in different feminine roles and helps to move from one to another or combine their existence. Her attributes are a dagger and a torch (like Psyche).

The lunar goddess of the dark places of the human soul, the goddess of transformation and crossroads, she helps to cut off what has become superfluous, helps to go through a difficult period, find meanings and the right time. She helps you not to act, but to be in the moment. She knows the sequence.

Hecate is able to see the trauma and endure it because she is aware of a different nature of time - let's call it feminine. This time measures timeliness, readiness, and maturity (of soup, of the fruit on the tree, of readiness for childbirth and the time to be born, the time to die, the time to change or refuse to change, the time to say goodbye, age and mental maturity)

Lack of attention and respect for feminine time, for the "state of readiness" as a means of measuring inner mental space, is a negative or dead mother complex. This space is full of anxiety, depression, disharmony, persecution Does the experience of the absence of feminine time create a field for the emergence of dissociation?

Harmony is always born of opposites, because harmony is the union of many similar [entities] and the harmony of divergent ones. - Nic. Arithm.

All of the characters and circumstances in the Sedna myth depict the path of disharmony or disunity.

For Harmony to emerge as a child of Aphrodite, it takes time to mature (a container that Hecate, for example, creates with her patience). Ares is also a masculine spirit who is well versed in the nature of the energy of aggression and war, as well as the nature of dance. He is a father who protects his children and who (perhaps the only one on Olympus) opposes violence in love affairs

In other words, Ares is good at distinguishing between a boundary, a tact, a rule, a taboo.

### Introducing rules and taboos:

- enables the process of Regression into experiential experience in a sufficiently safe and sufficiently dangerous space
- activates the practice of focusing attention and helps to concentrate on processes in internal and external reality,
- restores the experience of the time of feelings as an intra-psychic connection with oneself
- the function of thinking begins to work differently to comprehend what is happening inside the person.

Once again, it's about **tracking**, but this time based on the myth of the children of Aphrodite and Ares

In the process of Cold Water Swimming, under the condition of Attention and Time, the soul and body go through the following stages: feelings

#### Phobos - fear

• Fear of impudent death, uncertainty, doubt. Fear of the unknown,

Animal horror on the verge of madness, despair before the inevitable. The feeling of freezing. Tension. Scalding water - cold, dense, strong, pushing, embracing, salty.

# Deimos - panic, fear of death

 Panic, fuss, shame of giving up. Feelings: It is difficult to breathe, chest tightness. Tension.

## Anteros - hatred, rage

 Rage, anger, struggle, energy. Feelings: Absence of thoughts. Tension. Sky and salt water. The power of the waves. Movement. As much movement as possible with the whole body.

## Potosis - existential loneliness, longing, sweet pain and languor

• Existential loneliness, alienation, sadness. Sensations The surface of the skin is not felt. Powerlessness.

# **Chimeros** - bodily arousal

• Surprise, discovery. Feelings of pride and power, dissatisfaction with the end. Feeling of unexpected relaxation of the chest and the whole body.

## **Eros** - pleasure, connection, vitality

 Playfulness, fun, laughter and joy Feelings: Lightness. Deep and full breathing is restored. Tingling sensation on the skin. Pleasure and warmth builds.
 Muscle joy. Intense pleasure in existence, strength, energy

### Harmony is the fullness of being, embodiment

 Harmony and calmness, silence. Feelings: A sense of the world as a place full of beauty

# The significance of extreme fear of death in the process of Cold Water Swimming.

Cold Water Swimming creates an environment for the emergence of the image of Death as a connecting symbol between body and soul.

In Ukrainian culture, there is an expression "to die of fear", which means to be very afraid.

The rather brief emotional experience of dying of fear and the external experience of contact with danger coincide for a brief moment with the internal experience of trauma.

The process of regeneration, which takes place literally, with the help of proteins and hormones of cold shock, becomes a literal experience of symbolic dying on the

bodily level, and again it is important that this coincides with the emotion of fear of death.

In this way, the connection with the dissociated material is reconstructed and, drop by drop, the possibility of this material's living appears.

#### Conclusion.

The body is an alchemical vessel,

in which neuroconnections and the system of mental self-regulation are restored with the help of Cold Water Swimming. This practice is helpful for PTSD, early childhood developmental trauma, severe depression and other types of trauma.

Depression gets symptom relief.

The level of tension and anxiety is worked through and reduced, a mechanism of adaptation to feelings appears and, as a result, the level of affect decreases.

A sense of control is restored during a stressful situation.

Progression and causality are restored.

The resource for replenishing the deficit is rediscovered within the person and this eliminates the dependent or codependent position, instead awakening the experience of potentiality and the discovery of one's own strength of mind.

The inner space of time and place for feelings, as a place of being of the soul, is developing.

The observing Ego develops and makes the process of embodiment of the Self conscious and complete.

The birth and embodiment of lost parts of the soul takes place