

WATER SOURCE OF LIFE



WATER VITALIZATION

WITH THE

AQUAKAT[®]

Quelle des Lebens

WATER – SOURCE OF LIFE

In 2015, 191 countries of the UN General Assembly voted that by 2030 all people on Earth should have access to clean water. That this is a human right. Some states have already recorded the right to water in their constitution.

This clearly shows that access to clean drinking water is becoming increasingly important in our time. Already in ancient cultures and religions, water was regarded as an elemental force and source of life. Great doctors of antiquity, such as Paracelsus, praised water as a healing remedy. It is therefore more than ever necessary to deal carefully with water and try to curb wasting and polluting it.

WHAT IS WATER?

It is well known that the water is H_2O . But that's not all, by far. If one studies the element of water closer, it becomes evident what a wonder it is.

Today, a lot of effort is made to find water on other planets. It would certainly make more sense if we would deal more carefully, more focused and more consciously with our own resource water.

So water is a chemical compound of the elements oxygen (O) and hydrogen (H). Water is the only chemical compound on Earth, that occurs in nature as liquid, solid and as gas. The designation water is used for the liquid state. In the solid state, one calls it ice and in the gaseous state, it is termed water vapour.



Water is the basis of life on Earth.

The properties of water have fundamental importance for life on Earth. These physical, chemical, electrical and optical properties are based on the structure of the water molecule and the resulting concatenation and interactions of water molecules with each other through hydrogen bonds, electric dipole forces and other forces such as ¹van der Waals forces.

In nature water does not occur in its pure form. It always contains dissolved substances (mainly salt ions), even if only in barely measurable concentrations.

Such dissolved substances change the properties of the water. Very pure water is produced in the laboratory by distilling.

(Source Wikipedia)



¹ In physical chemistry, the van der Waals forces (or van der Waals' interaction), named after Dutch scientist Johannes Diderik van der Waals, are the residual attractive or repulsive forces between molecules or atomic groups that do not arise from a covalent bond, or electrostatic interaction. The resulting van der Waals forces can be attractive or repulsive.

CHEMICAL PROPERTIES

pH Value

Acidic	Neutral	Basic
0, 1, 2, 3, 4, 5, 6	7	8, 9, 10, 11, 12, 13, 14

pH is the measure of the concentration of hydrogen ions in aqueous solutions and thus the measure of the acidic, neutral or alkaline state of a solution. The pH scale ranges from 0 to 14.

Acids have a pH less than 7 and bases have values greater than 7. Water in its original form has a pH of 7 (neutral). According to European drinking water regulations drinking water should have a pH value not under 6.5 and not above 9.5.

Water Hardness

Hardness is caused by compounds of calcium and magnesium, and by a variety of other metals. As water moves through soil and rock, it dissolves very small amounts of minerals and holds them in solution.

Calcium and magnesium dissolved in water are the two most common minerals that make water „hard.“ The dissolved hardness elements can form insoluble compounds, especially lime and lime soap.

The minerals belong to the water and are mainly responsible for its own special flavour. Also calcium is one of them - albeit with side effects. Because of the resulting lime build-up, it can cause major problems and costs.



A portion of the ancient Roman Eifel aqueduct in Germany. In service for about 180 years, the aqueduct had deposits of scale up to 20 cm thick along the walls.

Source: Wikipedia

It is less known that soft water also can cause damage. Especially by corroding metals and metal surfaces. This leads among other things to rust.

When the water is soft, the inside of the pipes can be protected by lime. Removing the lime also means waiving its protective effect. Water experts therefore recommend leaving all of the valuable calcium in the water.

Hard Water	Soft Water
Disadvantages	Disadvantages
Lime deposits	Corrosion and rust
Higher energy costs (e.g. for hot water production)	Aggressive water (pitting)
Damage to electrical equipment (e. g. coffee machines)	Solves heavy metals from pipes (e. g. copper)
Advantages	Advantages
Protection against corrosion and pitting	Better solubility
Protection against corrosion and pitting	Better solubility
Better taste	Less detergents required
Textured water	Keine Verkalkungen

Hardness	Total Hardness in Moles	Total Hardness in Degrees
1 soft	0 to 1.3 mmol/l	0 – 7°dH
2 medium hard	1.4 to 2.5 mmol/l	7 – 14°dH
3 hard	2.6 to 3.8 mmol/l	14 – 21°dH
4 very hard	above 3.8 mmol/l	or > 21°dH

(1°dH (German hardness degree)

1.78°fH (French hardness degree) or 1.253°e (English hardness degree))

Minerals

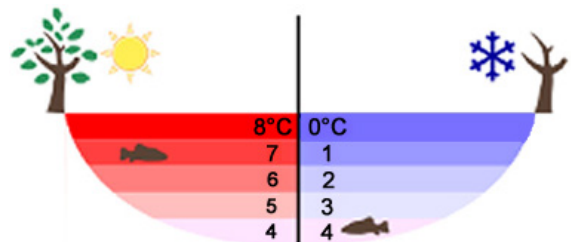
Water contains many essential minerals and trace elements that our body needs. The most important is the already mentioned calcium. But also iron, potassium, magnesium, sodium and chloride.

Anomaly of Water

If water behaved in accordance with the normal physical laws, no life would be possible. Therefore, water can be described as anormal.

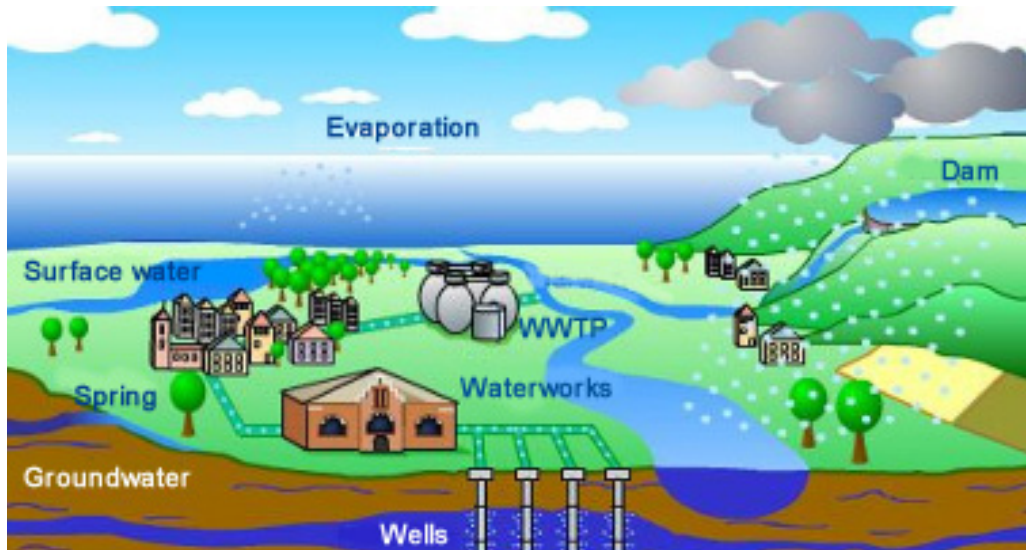
Some of the most significant anomalies:

- Highest density at + 4 ° C (in this state water is the heaviest). Therefore ice and warm water floats on top.
- Water changes readily between solid, liquid and gaseous states, and that without the usual high energy consumption
- Boilingpoint at + 100°C
- At + 37°C water has its highest dissolution behaviour



Water Cycle

WATER CYCLE



Water is in a constant cycle between precipitation, runoff and evaporation. Unlike mineral and fossil raw materials water is, with few exceptions, not consumed as a simple compound. Water is only used and can be more or less polluted and is afterwards loaded with pollutants.

The total amount of water on earth in all states of aggregation remains largely the same, only the distribution (snow, ice, waste water, ground water, ...) changes.

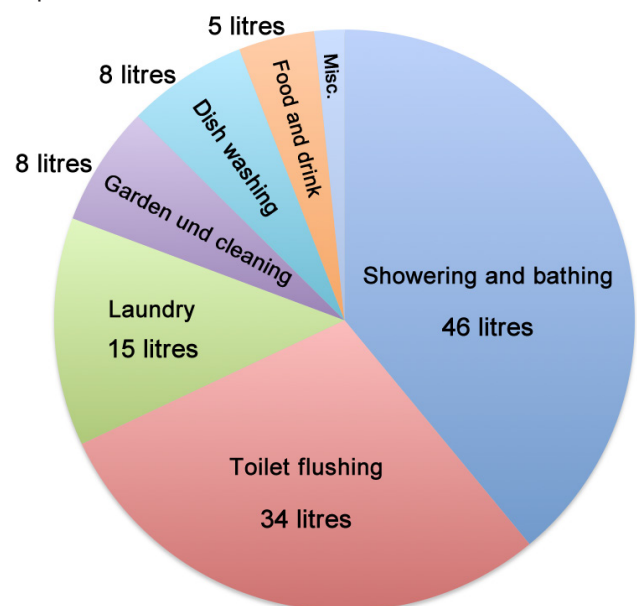
Water is not a regional issue. Water and the water pollution is a global concern. For example two weeks after the nuclear accident in Fukushima (Japan) radioactive particles were detected at the Jungfrauoch in Switzerland (...) In many areas, drinking water is reprocessed several times and consumed again. For this purpose, spring water is normally mixed with the less optimal water.

WATER CONSUMPTION

Tap water is used for everything, toilet flushing, irrigation, washing systems, industry, etc.

In the last decades in Europe one calculated with a daily drinking water consumption of 140 to 260 litres per person.

The desert city of Dubai with 500 litres per day and person rank among the fore-runners (mix of groundwater and desalinated seawater).



ECO-BALANCE

As determined in a comparative study for Switzerland, drinking water from the faucet causes up to one thousand times less environmental impact than bottled water. Negative factor for the eco-balance of drinking water are the infrastructure for processing and distribution as well as the energy consumption, for example for pumps. Energy is also required for the production of drinking water.

SAVING WATER AND HYGIENE

Saving drinking water should be limited in scope as it is by no means sterile and microbial contamination of the entire water installation can ensue if there is stagnation in the pipes. Drinking water may contain a certain concentration of bacteria and germs. Stagnation can cause proliferation of harmful germs such as Legionella. Authorities therefore recommend flushing the pipes at least every 72 hours.

VIRTUAL WATER CONSUMPTION

Our virtual water consumption is less obvious, but far more important. Virtual or latent water is a term for water, which is used to manufacture a product. Included is also water consumption, which is hidden at first glance.

In the manufacture of microchips, for example, 32 litres of water are consumed, in the production of 1 kilo of beef 15,000 litres. In the production of beef not only the consumption of drinking water by the animals is calculated, but also the natural precipitation and irrigation of fields and meadows, which provide the feed. A distinction is made between „green, virtual water“ (precipitation and natural soil moisture) and „blue, virtual water“ (irrigation).

Recommended link: www.waterfootprint.org

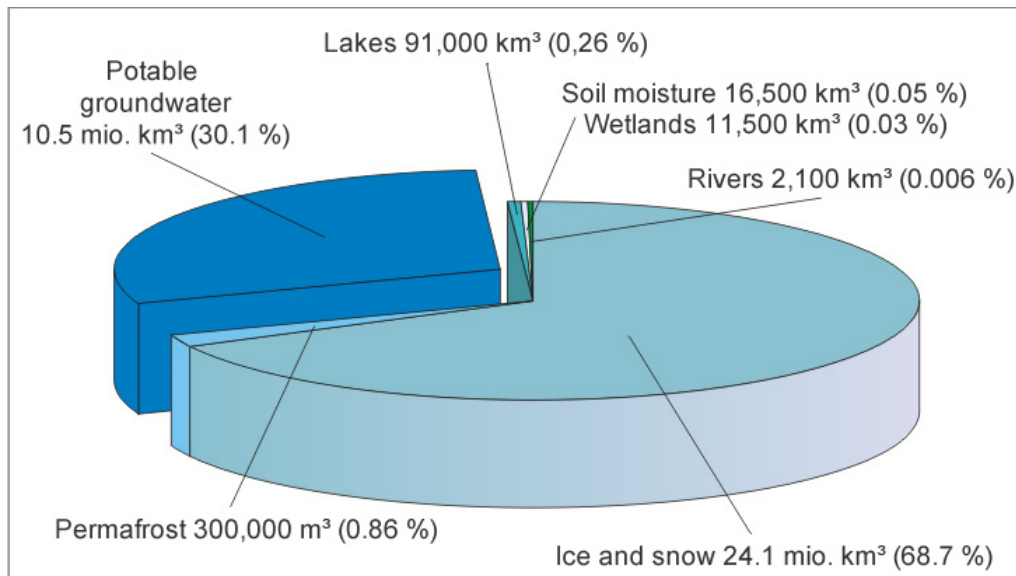
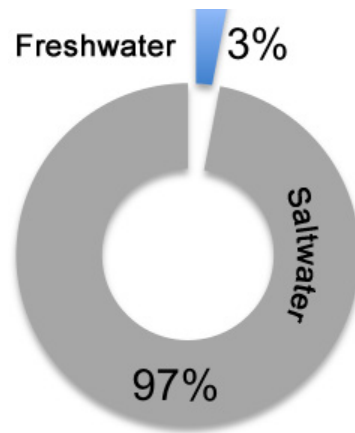


Food no. 1

WATER – OUR FOOD NO. 1

Thanks to water, there is life. And it is also our most important food.

It is estimated that on Earth there are some 1.4 billion cubic kilometres of water (71 % of the earth's surface). However, of this immense water reserve 97 % is salt water and only 3 % are available as freshwater. Of these 3 % most of it is frozen in ice and only a fraction of the water reserves exists as drinkable water in a constant cycle of evaporation, precipitation and runoff. With this information it becomes clear, how little water is available as drinking water.



WHAT IS DRINKING WATER?

Any water which is intended for human consumption is defined as drinking water.

Drinking water must not contain any pathogenic microorganisms and should include a minimum concentration of minerals. The most common minerals dissolved in drinking water are the cations calcium (Ca^{2+}), magnesium (Mg^{2+}) and sodium (Na^+) and anions carbonate (CO_3^{2-}), bicarbonate (HCO_3^-), chloride (Cl^-), and sulfate (SO_4^{2-}).

The sum of the concentrations of calcium and magnesium is known as water hardness.

HOW MUCH WATER DO HUMANS NEED TO LIVE?

The water requirement of a person varies depending on physical condition, body mass, activity and climate. A person takes in water in the form of food and drink and excretes it with urine, feces, sweat and breath. Water is also produced in the body by oxidative conversion of nutrients.

As a "high drinking water requirement" the WHO estimate 2 litres per day for an adult weighing 60 kg and 1 litre for a child weighing 10 kg. However, recent studies indicate that the fluid requirements can be met by adequate consumption of beverages such as juice, milk or coffee and varies greatly from person to person.

Since our body is composed mostly of water and since this water must be „topped up“ continually, the question arises, what quality does the water (the liquid) have that we use for drinking?

WATER FOR DRINKING

Spring Water

Spring water must have its origin in a subterranean water resource. It must only be bottled directly from the source. The quality must at least correspond to that of normal drinking water.

Ground Water

Ground water is underground water (standing or flowing), which contiguously fills cavities in the ground or rocks. Because it inter alia is formed by seepage of rainwater and flows to a surface water or emerges as spring water, it is a part of the water cycle.

Mineral Water

Is just ground water, which compared to tap water has been enriched with a minimum amount of minerals. It must be that „originally pure“, i.e. drinkable without further processing. Many minerals are essential for the body and can be covered by this water.

Bottled Water

Is recycled („artificially produced“) drinking water that's been mixed with natural mineral water, saline or salt water. Bottled water can be filled in container and tank wagons.

Healing Water

Is the name for a water which is attributed special healing properties (eg Lourdes, the Ganges). Must not differ in composition from the usual mineral water.

IS OUR TAP WATER SAFE TO DRINK?

In Germany, Austria, Switzerland, France, the Netherlands and Scandinavia drinking water is the most controlled food and thus entirely suitable (from the legal point of view) for consumption.

In some cases increased pollution of drinking water with harmful substances (for example arsenic, lead, cadmium, chloride, iron, copper, nitrate, phosphate, zinc, uranium) can occur at the end consumer. In March 2013, the ZDF reported on increased contamination of drinking water with chemical wastes such as antibiotics, pesticides or disinfectants. In Germany, for example, the limits are established by the official Drinking Water Ordinance; but for many pollutants limits have not been set.

IS IT BETTER TO DRINK BOTTLED WATER?

Water for drinking must not come out of the bottle. Again, the virtual water consumption plays an important role. Why do we need, for example, bottled water from France if the own tap water is safe to drink? Even domestic/in-house processing (filtering) is better in the long run. Not to mention the CO₂ balance for transportation, storage, etc.

In the German-speaking countries there are higher quality requirements for tap water than for industrially packaged mineral and bottled water. Tap water and bottled water do not - as opposed to natural mineral water - have to be "originally pure" and may therefore be processed or mixed. So water with added carbon dioxide may not be sold in restaurants as mineral water, regardless of quality and mineral content.

QUALITY STANDARD

In some countries the drinking water quality is often poor due to lack of processing and monitoring.

In popular holiday destinations such as Spain and Portugal, the quality of the tap water varies some from „suitable as drinking water“ to „dangerous to health when consumed in large quantities“. The drinking water throughout Europe can be used for cooking.



DRINKING WATER QUALITY AND HEALTH

A safe and hygienic water supply is a decisive contribution to the health and disease prevention. Drinking water should meet the following requirements:

- colorless, odorless
- free of pathogens
- should contain dissolved mineral substances in certain concentrations
- taste neutral and cool
- not hazardous to health

Disinfection of drinking water is permitted by the Drinking Water Ordinance. In central Europe drinking water is mostly collected from groundwater through wells, less often artesian wells or directly from sources. Also surface water from dams, lakes or rivers is used. The water is taken either directly from the waters or from bank filtrate from wells near the water.

In some cases, mostly in the non-European space, it is obtained directly from river water. The transport to the consumer in developed countries mostly takes place through a water distribution system of pumps, pipes and tanks. In many developing and emerging nations, as well as sometimes in emergency situations in industrialized countries, it is distributed by tank trucks or in containers such as bottles or barrels.

Water in pipes should always flow. If it stagnates for a long time in the pipes, microorganisms can develop in a higher concentration than is permitted.

Reasons for this could be that:

- the water contains organic substances useable for the microorganisms
- the pipe material used releases substances into the water
- the pipes are oversized
- too little water is drawn from the system
- temperatures are used in which bacterial growth, in particular of pathogens, is possible
- the system has not been brought properly into operation or is operated incorrectly

DRINKING WATER TREATMENT

Drinking water treatment is the production of drinking water by purifying groundwater or surface water by means of chemical and physical treatment processes and the setting of certain parameters (pH, ion concentration) in order to make it suitable for use as drinking water.

The type of water treatment depends on the quality of the raw water and is based on which substances of the raw water need removal. In particular, the filtering process, the removal of iron, manganese and carbon (partial softening), deacidification, degassing, and disinfection (ultrafiltration, ozonation, chlorine, chlorine dioxide or sodium hypochlorite (chlorination)) are frequently applied. When water is filtered, if necessary depending on the pore strength of the filter, substances like minerals are added to achieve sufficient osmolarity (= *osmotic concentration is the amount of osmotically active particles in a solution (Wikipedia)). For the production of drinking water from salt-rich raw water reverse osmosis systems are used.

*Osmotic, osmosis: see <https://en.wikipedia.org/wiki/Osmosis>

Groundwater is usually of such good quality that it can be processed to drinking water without flocculation and disinfection. Further methods of water treatment are softening and partial desalination by ion exchange or membrane technology such as osmosis and dialysis.

Recommended reading:

Water. A book about the phenomenal elixir of life and its re-vitalisation
by PENERGETIC and Gottfried Hilscher

You're Not Sick, You're Thirsty!
by Fereydoon Batmanghelidj

Your Body's Many Cries for Water
by Fereydoon Batmanghelidj

The Fourth Phase of Water: Beyond Solid, Liquid, and Vapor
by Dr. Gerald H. Pollack

The Hidden Messages in Water
by Masaru Emoto

Recommended link:

www.youtube.com/watch?v=Jd2tPtqSyNY
The Great Secret of Water - Dr. Gerald H. Pollack



SPECIAL RESEARCH

As the book title, „Water - much more than H₂O“ by Dr. Pollack indicates, there are still news things to be discovered about water. Water cannot just be reduced to the formula H₂O and to that, which has thus far been commonly known about it. Water is not only food and thirst quencher, transportation medium and coolant. Some researchers say that water has a kind of „intelligence.“

As an example, Wolfgang Ludwig holds the view that: “The water, even after a treatment, contains specific signals that may be detrimental or harmful to health, depending on the wavelength.” These may be remnants of removed pollutants”.

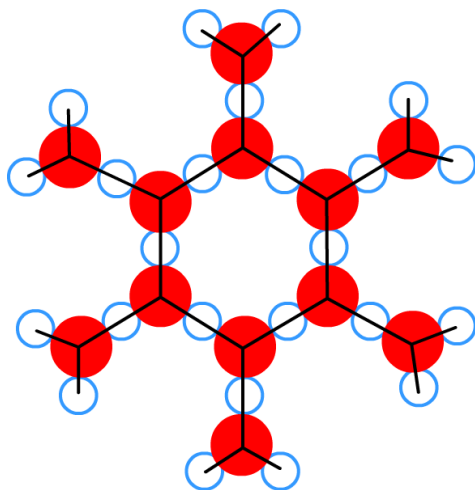
How do you determine this? What does it mean in general?

Some new measurement techniques must be developed for this purpose and it is necessary to resort to the observational sciences. Many results of these observations cannot be measured or determined with currently accepted methods. Imagine that you have discovered something that changes the temperature. You feel it, but the only measuring tool you have available is a meter stick ...

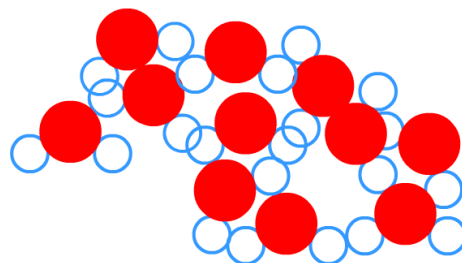
CLUSTERS

Researchers have found out that water forms so-called clusters (molecular lumps) that may nest in foreign atoms. This creates a kind of „footprint“ of the foreign atom. The water clusters store this print and pass the information on, even after the substance has been removed. The molecular clumps seem to give the water a memory, to make it an intelligent substance.

Ordered Water Clusters



Unordered Water Clusters



WATER HAS A MEMORY

Each water molecule has its own unique identity. Dr. Ivan Engler, head of the Medical Research for Naturopathy in Salzburg, has studied this phenomenon extensively. He found out that water can store information in its cluster structure and that this capacity by far exceeds that of mainframe computers.

See book: Polaritätsphänomen, Informationsträger, Lebens-Heilmittel.

by Ivan Engler und Viktor Gutmann

WATER, CLUSTERS AND HOMEOPATHY

Samuel Hahnemann made this discovery already more than 200 years ago. In an experiment on himself with cinchona bark, he tested the effect by repeatedly diluting the original substance in alcohol and shaking the dilution. This dilution had the same effect on malaria as the original substance. This result is referred to as the birth of homeopathy according to Hahnemann.

WATER IS A LIQUID CRYSTAL

One can recognize the uniqueness of water molecules by looking at the perfect geometrical structure of a snowflake under a microscope. Although all snowflakes are based on the same crystalline structure and only consist of H₂O, no two identical snowflakes have ever been found.

If a snowflake melts and refreezes under natural conditions, the exact same snowflake structure will form.

For the latest research on this subject see:

(Book in German) „Wasser - viel mehr als H₂O: „Bahnbrechende Entdeckung: Das bisher unbekannte Potenzial unseres Lebelementes“ by Dr. Gerald H. Pollack and Prof. Dr.

Manfred Wussling

and

www.youtube.com/watch?v=Jd2tPtqSyNY (The Great Secret of Water - Dr. Gerald H. Pollack)



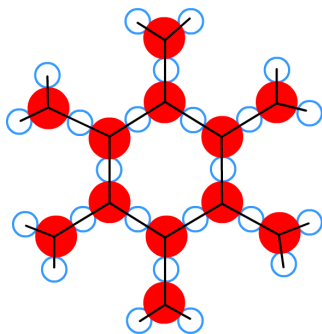
THE INFORMATIONAL POWERS OF WATER

Water can transmit frequency patterns and wavelengths. If one throws a stone into the water, a wave is created, which spreads circularly - even spatially as it also goes deep. So because of its structure, water is capable of passing on information. If two identical wavelengths with the same frequency and different origins overlap, it is referred to in physics as resonant effect.

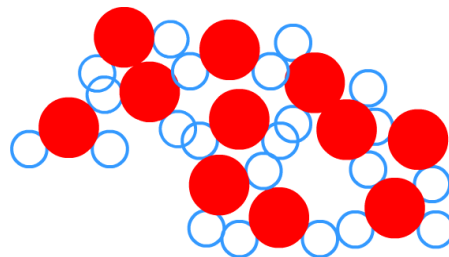
Resonant wavelengths produce order as can be seen in crystals in nature. The water is an informed crystal that thanks to its liquid state can adapt to our ever-changing environment. This is true in both the positive and the negative. Just as water can absorb healing and positive information, it is able to save harmful and negative imprints. The common technologies used today for purification and treatment of drinking water, which only take the chemically detectable „cleanliness“ of the water into account, fail at this point.

STRUCTURED WATER

One refers to water as structured, if it is ordered. That means small water clusters, increased uptake of information (e.g. homeopathic products), good taste, fewer problems with lime and rust.



Structured water



Unstructured water

TAP WATER IS UNSTRUCTURED WATER

Already 80 m of pipe are enough to destroy the natural movement of water, mainly because of the pressure. The pressure makes the water molecule loose their structure and its crystalline phase is destroyed. It loses the natural order and also its information content.

Even „dead“ water has a residual content of about 4 % crystalline structure. This residual stock makes it possible to get back from 4 % to 100 % crystalline phase in a natural cycle. For example with the AquaKat.

WATER AND HEALTH

What does the above findings mean for our health? It does not seem to be sufficient to clean the water only from a chemical point of view. It takes a lot more to get really good, healthy water. Water fulfills many vital tasks in the body.

As a solvent and transport medium it makes metabolic processes possible and it's critical in the regulation of body temperature, etc. One should therefore pay close attention to the quality of the water, one uses to replenish the „reservoir“.

The Water Cycle in Humans

In 24 hours 1,400 litres of water flows through the brain

In 24 hours 2,000 litres of water rinses the kidneys

In 24 hours the body produces 8.2 litres of digestive fluids

In 24 hours an adult excretes 2 – 2.5 litres of water

Like in Nature, there is a water cycle in our body. The human body consists of around 70 % water, the brain and body of an infant even of about 85 to 90 %. Every day an adult needs at least 2.5 litres of fluid (in the form of food and / or water).

More about the „remedy“ water can be found in the book: „Water: For Health, for Healing, for Life“, author: F. Batmanghelidj.

WATER AND NUTRITION

A significant part of our water supply does not come from drinking, but from foods. Thus, for example, fruits and vegetables contain about 80% water. If you have the opportunity to buy these from organic farming, an important part is already done. Also, a gentle and more ecological production of food for humans and animals can be achieved with the agricultural PENERGETIC products.

WATER VITALIZATION – FOR THE SAKE OF YOUR HEALTH!?

Imprinted energy oscillations (or clusters) contain information. Therefore, also oscillations stemming from contaminants are present in the water as information, which among other things affect the body's regulatory system. So water is not clean or safe, just because the regulatory limits are met, the associated information must also be deleted.

Numerous systems and products have to date been developed with which chemical, physical and informative contamination can be eliminated; this includes our AquaKat®.



Experience vitality

EXPERIENCE FRESHNESS

Everyone who has drunk a sip of fresh, pure mountain spring water, can rave about its refreshing quality and benefits. Surely these are purely subjective parameters, yet the special characteristics of the water are recognized. Drinking the same water from the tap, the taste has changed greatly. The same also applies to food and drinks prepared with the water.

VITALITY AND SPRING WATER

Alive spring water for has a high energy or vibration, while biologically „dead“ water (e.g. from the water pipes) has a low vibration. One feels this for example when taking a bath or showering.

TRANSPORT MEDIUM WATER

Lifeless, dead water is no longer suitable for detoxifying the body and provide it with vitality. Water should not only be cleaned but also vitalized. Our customers also mention the detoxifying effect of the water vitalized with the AquaKat.

THE ENERGETIC QUALITY OF WATER

The energetic quality of drinking water plays an important role in the body, but is not easy to verify with prevalent academic methods. If, for example, a naturopath tests the tolerability in accordance with the method of bioresonance, the vitalized water is conducive to health and the „dead water“ will in some cases even have negative effect.

MEASURABILITY OF VITALITY

One must use biophysical measuring methods, in which the person takes part. Like this the tolerability of the water for the individual, or even animals, can be measured. A general assessment of the energetic effect of the water using these methods is unfortunately not (yet) possible.

Another option is crystallisation pictures, but it requires a lot of experience both in production and interpretation.

- See the book: „The Hidden Messages in Water“
by Masaru Emoto
- See reports and studies on PENERGETIC by Dr. E. Langenscheidt

WHAT IS WATER VITALIZATION?

Vitalized or alive water is water with a high degree of order and structure. Conversely, this means that water revitalization is nothing more than an „ordering“ method, which restores the water structure.

VITALITY VIEWED OBJECTIVELY

Picture a spring in the mountains. The water gushes out of the ground. An epitome of vitality and freshness. Observing the water more closely, one finds that it is constantly in motion. It swirls (spins). It meanders (flows in serpentine) sometimes fast, sometimes slowly. It's alive, energized water.

VITALITY AT THE MOLECULAR LEVEL

Water has a permanent dipole moment. The hydrogen is positively charged and the oxygen negatively. This leads to the formation of hydrogen bonds (several such bridges together then form the so-called clusters). In liquid water, most water molecules are linked by the hydrogen bonds.

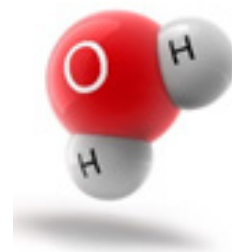
The binding energy of the hydrogen bonds is not very stable. Therefore, the hydrogen bonds break up after a very short time and constantly re-form. The more often, the more orderly and structured this process of formation takes place, the more vitalized and structured (natural) the water is.

On the subject of hydrogen bonding and molecular structure of water, we recommend the following links:

<http://www.seos-project.eu/modules/laser-rs/laser-rs-c07-s03-p02.de.html>

<http://www.youtube.com/watch?v=Jd2tPtqSyNY>

The Great Secret of Water - Dr. Gerald H. Pollack



HOW DOES WATER REVITALISATION WORK?

Simply put the AquaKat stimulates the „orderliness“ (the formation of hydrogen bonds) of water. This water gets back its natural structure.

THE AQUAKAT

The AquaKat is a physical impulse transmitter (sender, catalyst), which forwards a previously programmed frequency pattern on the water.

The effect of the device is based on the principle of resonance. As explained above, water responds to frequencies and can store or process these. The inner part (IC^{spring water}) of the AquaKat transmits the programmed information of natural, high quality spring water, oxygen and minerals to the water, making it come into resonance and affecting the molecular behavior (cluster) of the water.

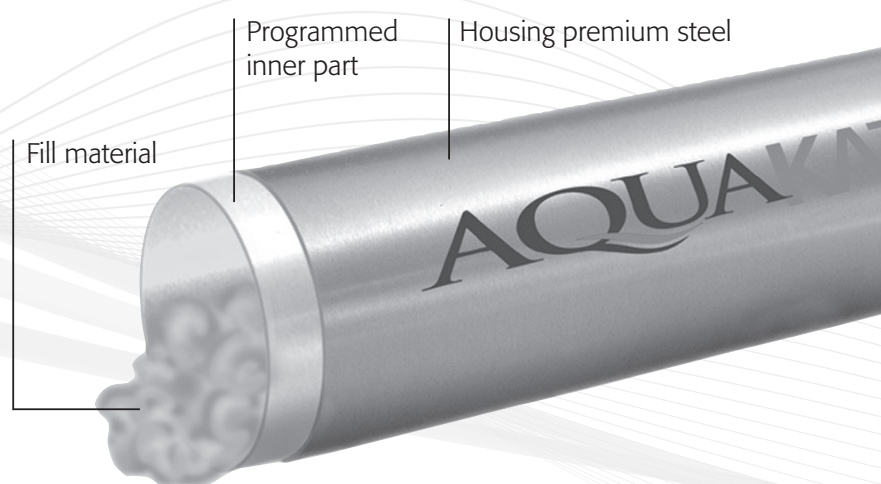
The programming of the inner workings of an AquaKat is done with PENERGETIC Technology. This can be compared to the well-known programming of a chip, CD, DVD etc. From an original any number of copies are created. There is no difference between the effect or resonance created by the original or by a copy.

The AquaKat works on the physical cleanliness of the water. With the AquaKat, the negative information in the water can be dissolved. The order and structure of a natural spring water is returned to the water.

WHAT IS IN THE DEVICE?

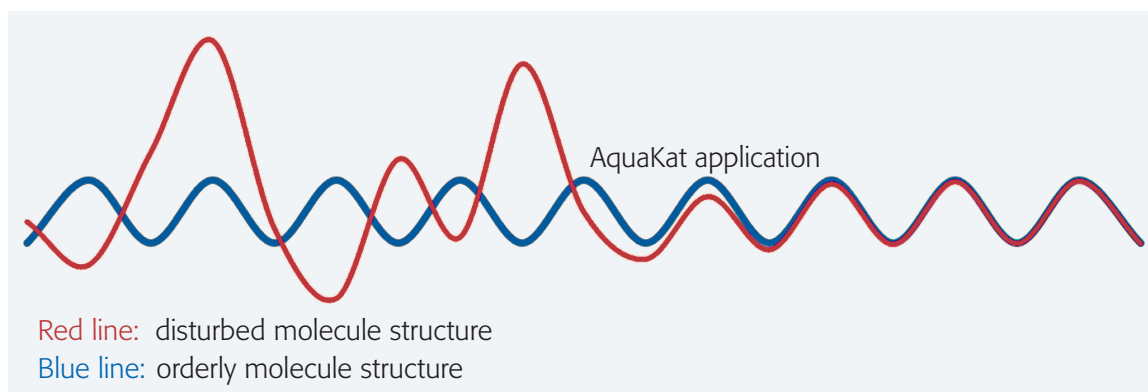
The AquaKat consists of two components. The housing and the programmed internal part (IC^{Springwater}).

The stabilization material in the AquaKat is made of organically grown flax and is used to press the inner part against the wall of the housing. The inner part (IC^{Springwater}) is constructed with layers, alternately conductor and insulator layer. This results by itself in a reinforcement of the programmed frequency pattern by and ensures a constant and consistent flow of information.



RESONANCE EFFECT

Through the exposure to the frequency of the AquaKat the water molecules enter a desired physical resonance. Thereby their structure undergoes changes until it corresponds to that of natural, untreated spring water. A coherence of the frequency pattern takes, so to speak, place between the AquaKat and the water molecules.



With an AquaKat L the coherence of the frequency pattern is maintained in the water pipe for a pipe length of approximately 80 m and is then destroyed again mainly by the persistent pressure. Also strong external interferences such as strong magnetic fields, electro-smog or heating the water reduces the spring water structure of the water.

It is therefore recommended to install an additional revitalization (e.g. an AquaKat M) after the hot water production, which reduces the vitality of the water by about 30%, to obtain optimum quality to the last tap.

ANTAGONISTS TO VITALITY

There are a number of influences having negative effects on the vitality of the water:

Pressure	The greatest antagonist to the vitality. It destroys the natural structure. This is a problem that arises when water is transported in pipes and particularly in industrial processes.
Heating	Dissolves the hydrogen bonds. Once the water cools down they form again, but this is not always possible especially in pipes or under pressure.
Chemicals	Addition of chemical substances (chlorine, etc.)
Filters	Filtering (carbon, reverse osmoses, etc.)
Electro-smog	Strong electromagnetic fields

Important!

So vitalization is not a question of quantity, volume or flow rates. It also depends on many, external conditions and factors.

Even with water that is, for example, used as process water for industrial purposes, it is possible to vitalize a large amount of water, also under unfavorable external conditions (pressure, heat, magnetic fields). The question is how long the regained vitality / structure of the water molecules can be maintained.

From this follows that the revitalization impulses should, if possible, implemented after/behind external influences.

When developing the AquaKat series, attention was paid to ensure that the output capacity of the devices were adapted to their respective areas of application. However, a formula cannot be created strictly based on water quantities, pipe lengths und pressure conditions.

One way to maintain vitality is repeating the impulses regularly (such as after a certain distance (AquaKat L for 80 m pipe) or after impacts from filtering, heating, dosing systems, valves, etc.).

Important!

Water Revitalisation is not a panacea. With revitalization and structuring no substances are removed from the water. If the water is contaminated or contains harmful ingredients, we strongly advise to have them removed (with filters, reverse osmosis, precipitation, etc.). After such purification has been done, the water can be restored to its original spring water structure and vitality with the AquaKat.



Application also in case of

- Rust and traces of rust
- Lime deposits
- Poor absorption (dissolving capacity) of substances (detergents, fertilizers, etc).

Causes

- Water loses its original spring water structure and vitality through transport and treatment processes.

The Solution

- The AquaKat changes the molecular behavior of the water to such an extent that it again corresponds to natural spring water.
 - ⇒ As a result, the water regains the properties of fresh, natural spring water.

Benefits

- The intervals between decalcification of household appliances (aerators, pots, coffee machine, fittings, etc.) increase
- Lime and other deposits are easier to remove
- Less rust and rust traces
- Water and foods taste better
- Savings on detergents
- Less effort when cleaning
- Improved appearance and suppleness of skin and hair
- Plants and animals look healthier
- The water keeps fresh longer; important for cooling circuits, cooling lubricant suspensions, etc.
- Better assimilation of the water by humans, animals, plants and organisms
- And a lot more!

Furthermore

- Works also on standing water
- No installation costs
- Easy installation
- No energy consumption
- No maintenance costs
- Pipe system remains intact
- Also suitable for apartments and single taps
- Optimal vitalization of filtered water

Areas of Application

- Main water pipes
- Stables
- Caravans and mobile homes
- Whirlpools
- Hairdressing salons
- Plant nurseries
- Car washes
- Bakeries
- Laundries
- Clinics
- Industry
- Heating circuits

Notes

No lime is removed by installing the AquaKat. But a change in the structure of the lime and its behaviour takes place.

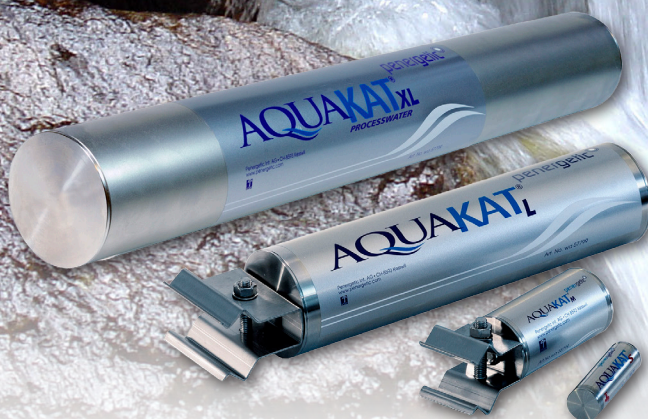
Before installing the AquaKat we recommend to descale / clean all aerators (faucet aerators) and shower heads. Remove any old lime deposits on bath-tubs, showers, sinks, tiles, faucets, coffee machines, cookers, etc.

The revitalized water can release/discharge lime at different intervals. It is therefore recommended to flush the pipes 4 to 6 weeks after the installation.

Do not mount the AquaKat on lead pipes.

Basic principle: "First sanitize, then vitalize!" When germs and bacteria strains (e.g. Legionella) are present, we first recommend doing a full sanitation before mounting an AquaKat.

Elektro-smog and leakage currents on the water pipes destroy the spring water structure. If you are in doubt, we recommend having it measured and if necessary take countermeasures (potential equalization, earthing via ground spike or if applicable shielding measures (RayGuard products)).



MOUNTING INSTRUCTIONS

General

In the house after the water meter and the pressure reducer and on pipes of heating circuits.

In the apartment under the sink, on the shower hose or the cold water pipe.

Mounting length: 5 to 10cm free pipe space.

If you have difficulties mounting, please contact us.



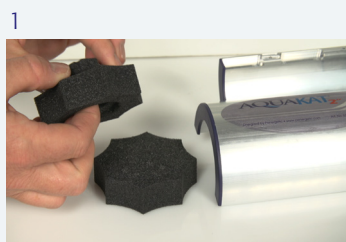
AquaKat L

AquaKat S

AquaKat M

Mounting the AquaKat 2"

First slide the two half-shells together over the pipe. Then insert the supplied spacers into the AquaKat.



View also our instructional video :
<https://www.youtube.com/watch?v=qJwKEuRjSHs>

Mounting the AquaKat

At the top and in the middle the AquaKat has screw threads. Depending on how the AquaKat is to be mounted, the clamping fixture can be placed at the top (vertical mounting) or on the side (horizontal mounting).

Fit the clamping fixture on one of the threads with the screw nut (wrench). Tighten well. The clamping is then slid over the water pipe and secured with bolt and nut.

RECOMMENDED USAGE

Application Area	Recommendation	Mounting Tips
Single tap	AquaKat S	Mount the AquaKat on the tap or the water pipe.
Small apartments	2x AquaKat M	The AquaKats are mounted on the hot and cold water pipes.
Large apartments	3x AquaKat M	The AquaKats are mounted on the hot and cold water pipes.
In apartments washing machines are often placed away from the living area (basement). Here it is advisable to mount an AquaKat S (depending on water hardness) to the water connection of the washing machine.		It is mounted on the water pipe to the washing machine.
Single-family house	1x AquaKat L 1x AquaKat M (Je nach Leitungsdimension und Wasserhärte auch 2 x AquaKat L)	The AquaKat L is mounted centrally on the cold water pipe after the water meter or filter system; the AquaKat M on the hot water pipe after the boiler.
Two-family house	2 x AquaKat L (Depending on pipe dimension and water hardness also 1 x AquaKat XL for cold water)	An AquaKat L is mounted centrally on the cold water pipe after the water meter or filter system; an AquaKat L on the hot water pipe after the boiler.
Heating systems in 1 to 3 family houses	1 x ThermoKat (Check water quantities and number of heating circuits with pumps)	The ThermoKat is mounted centrally after the heating pump.
Multi-family houses	Depending on the size of the building AquaKat XL, 2" or XXL are used.	
Large heatings systems	Depending on the size of the system AquaKat XL, 2" or XXL are used.	
Businesses and industry	Depending on the size of the system AquaKat XL, 2" or XXL are used.	

CAPACITIES OF THE AQUAKATS

It was mentioned earlier that the performance of the AquaKats basically does not depend on quantity, volume or flow rates. Nevertheless, the following information serves as a guide for selecting which model(s) to mount.

AquaKat S

Single taps. Mobile usage (hotel, camping, etc.).
After filtertens, reverse osmosis.
Water volume: 100 litres per day.



AquaKat M

Appartments. Additional vitalization of heating water.
Water volume: 750 litres per day.
Pipe length: 20 m.



AquaKat L

One- or two-family houses. Cold water vitalization.
Water volume: 3,000 litres per day.
(Agriculture 20 LSU).
Pipe length: 80 m.



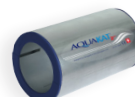
AquaKat XL

Residential buildings with up to 6 appartments,
commercial application.
Water volume: 6,000 litres per day.
(Agriculture 60 LSU).
Pipe length: 120 m.



AquaKat 2"

From one- to multi-family houses, also commercial
application.
Water volume: 12,000 litres per day.
(Agriculture 80 LSU).
Pipe length: 180 m.



AquaKat XXL

Residential buildings from 7 or 10 appartments,
industrial application.
Water volume: 30,000 litres per day.
(Agriculture 200 LSU).
Pipe length: 240 m.



CONSULTANT INFORMATION AQUAKAT AND THERMOKAT

Manufacturer

Penergetic International AG · 8592 Uttwil, Schweiz

Trade name

AquaKat® S, M, L, XL, XXL, 2"

Structure

Splash-proof stainless steel housing with pipe clamp
AquaKat 2" deep-drawn aluminium housing

Product description

The AquaKat is used for water vitalization and water molecule restructuring. The programmed informations stimulate the water molecules and bring the structure back to that of natural springwater through resonance.

No maintenance needed.

Mounting instructions and usage

Please note our recommendations.

Warranty

On the device: 30 days return policy. 5 years on material.

Duration of effect

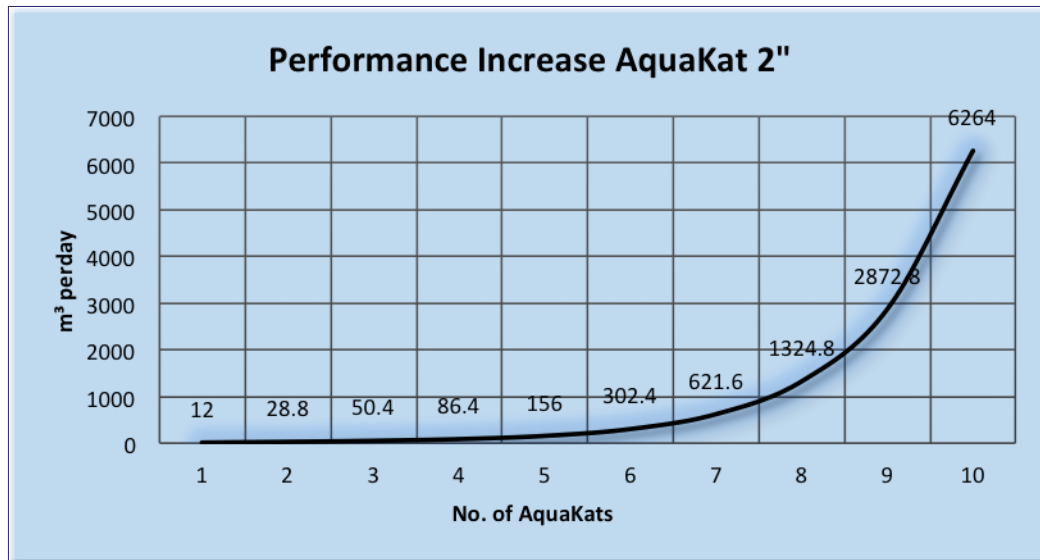
According to experience so far: up to at least 15 years (depending on area of application).

Product liability law

The AquaKat was developed for water vitalization. Amongst other things the effect on limescale is a side effect, which is verified by a measuring method that presently is not scientifically recognized. Therefore, the effect is no guaranteed promise, but a possible side effect.

PERFORMANCE OF THE AQUAKAT DEVICES

Mounting multiple devices increases the effect exponentially. For larger objects it is recommended to distribute the devices on the pipeline network to maintain the resonance signal and thus the molecule structure.



Performance calculation:

Basic unit performance (e.g. 12 m³) times the number of devices. The sum is divided by 10, times increase potential (2 units times 2; 3 units times 4; 4 units times 8; 5 units times 16; 6 units times 32; 7 units times 64; 8 units times 128; 9 units times 256; 10 units times 512; etc.). Then to this sum add the basic unit performance times the number of devices.

Example AquaKat 2 „(formula with 3 units):

$$(12 \text{ m}^3 \times 3) / 10 \times 4 + (12 \text{ m}^3 \times 3) = 50,4 \text{ m}^3.$$

APPROVALS

The AquaKat is technically a physical water treatment device. It does not have direct contact with the tap water as the AquaKat is only mounted externally on the pipe. Thus, an authorization is not necessary in accordance with the Drinking Water Ordinance.

FAQ AQUAKAT

QUESTIONS REGARDING FUNCTION

1. What is the AquaKat used for?

Water loses a great part of its vitality through technical and chemical processing, as well as through pressure and transportation. The AquaKat restores the original vitality of the water. The AquaKat was developed for re-vitalisation of tap water in single and multi-family houses, apartments, fountains, businesses, industry and agriculture.

2. How does the AquaKat work?

The special construction of the AquaKat makes it possible to transfer vibrational patterns that energize the water. The memory of the water is stimulated, i.e. certain water clusters (molecular chains and clusters) are activated and brought into resonance. This resonance is transmitted to the whole system. The AquaKat does not use magnetism, chemicals or electricity.

3. What effects does the AquaKat create?

There is reduction of the size of calcium crystals; how crystals in general are formed, is modified; the taste improves and substances like calcium, iron (but also detergents) dissolve better.

4. What quantities of water can be treated with the device?

With a steady water consumption the

AquaKat L is sufficient for a 1-2 family house, i.e. averagely 3 m³ per day.

AquaKat S can treat 100 lt. per day.

AquaKat M is sufficient for 750 lt. per day, with very good water up to 1 m³.

AquaKat XL is designed for a multi-family house with a water consumption of about 6m³ per day.

If more water is consumed, more AquaKats should be installed.

5. Where is the AquaKat used?

The AquaKat is used in single and multi-family houses and apartments. Further applications are in agriculture and industry, fountains, etc. The AquaKat can be used in a wide variety of „water situations“ for revitalisation.

QUESTIONS REGARDING THE INSTALLATION

6. How and where is it installed?

The AquaKat should be installed with the mounting clamp after the water meter and the pressure reducer. For mounting a 10-16cm free pipe section is required. There is no interference with the pipe system, as the AquaKat will be clamped to the pipe. The pipe should be clean and free of rust and dirt.

7. What can delay or impair the effectiveness of AquaKat?

Strong electrical fields interfere with the function of AquaKat. If there are large electrical devices in the room, the strength of the electromagnetic field at the installation point should be measured with a meter.

Plastic pipes are, in contrast to metal pipes, sluggish conductors (vibration transmitter). If the AquaKat is installed on a plastic pipe there will be a delay before there is an effect.

8. Are there any known problems related to the usage?

With very old pipes there is the risk that they start leaking as deposited limestone is released. For example, through already existing hairline cracks. One should not use AquaKats on old lead pipes.

9. There is no space for mounting as the minor pipes to the living areas are placed right after the main inlet. How should the AquaKat be installed?

- Install immediately adjacent to the water meter;
- Mount it on the first minor pipe as close to the main inlet pipe as possible;
- Place a bracket on the main pipe and mount the AquaKat on it;
- When testing the AquaKat, it can be placed lengthwise on the pipe or tied onto it;
- Ask for a narrower mounting clamp;
- Add a pipe section in the main pipe and mount the AquaKat on that.

10. What pipe sizes does the AquaKat accommodate?

The mounting clamps of AquaKat L and XL cover the range from ½ to 2 inches, those of AquaKat M ¼ to 1 inch. If you have bigger pipes, e.g. recirculation pipes in a swimming pool, a larger clamp can be ordered from the manufacturer.

11. Can the AquaKat be mounted in such a way that it touches two pipes?

This is possible in principle, but it is more effective to join the two pipes with a metal plate and mount the AquaKat before or on this plate. The best solution, however, is to install an AquaKat on each pipe.

12. Can the AquaKat be leaned against the wall?

No, the AquaKat should, if at all possible, be mounted hanging or standing freely.

13. Must it be installed in a particular direction?

No. The direction is not important.

14. There is a pipe for hot water and one for cold water. Should an AquaKat be installed on both pipes or can you connect the pipes? Does that influence the effect?

Ideally put the AquaKat L on the cold water pipe and an AquaKat M on the hot water pipe as the energy decreased when the water is heated. The AquaKat S can be used for single taps /outlets. Other possibilities: See question 11.

15. Can an AquaKat be installed at the hot water circulation (heating)?

For that we use our ThermoKat. Simply install it at the heating circuit. Advantages: active water, better heat conductivity, less sludge and deposits on the expensive thermostats. Saves energy.

16. Mounting an AquaKat on the main pipe is not permitted. How can you install the AquaKat in an apartment?

The AquaKat can be installed on the branch leading into your apartment or inside the apartment if possible at the beginning of the pipe. If there is too little space, the AquaKat M or S should be used. As needed it can be used in the bathroom, in the kitchen, for the washing machine, under-neath the sink, etc. Ideally it should be fitted on both the cold and the hot water pipes.

QUESTIONS ABOUT INTERACTIONS AND EFFECTS

17. Other Penergetic products are already in use. Does one need an AquaKat and can the dosages of the other products be reduced?

With the AquaKat installed, one sees a stronger effect of other Penergetic products where these get in contact with the vitalised water. You can check if the dosages of the other Penergetic products can be gradually reduced. On an average a reduction of around 20-30% is possible.

18. Can a ground wire interfere with the AquaKat?

Yes, if there is leakage current on the wire and the protective safety device of the control cabinet is out of order. If this is the case wrap electric tape around the piece of pipe where the clamp of the AquaKat is fitted. We also recommend sticking a Phone Chip on the AquaKat.

19. What difference does the pipe material make?

The AquaKat works on all pipe materials. It works the fastest or best with stainless steel, followed by galvanized steel and other metallic compounds. Plastic pipes delay the effect (see question 7).

20. A magnet is used to prevent lime build-up. Does it work together with the AquaKat?

No, the function of the AquaKat would be severely disrupted. The AquaKat tries to neutralize the magnetic alteration of the water. No positive effect will be detectable. One possible workaround is to dismantle the magnet, to hit the pipe with a hammer at several places to „resolve“ the magnetisation, then wait a few days before finally fitting the AquaKat.

21. An electromagnetic device for lime control is already installed. Does it work with the AquaKat?

See questions 20 above. Unplug the device and wait a few days before fitting the AquaKat.

22. Does a chemical water softening system interfere with the AquaKat?

Chemical softening systems cost a lot to maintain and are also extremely harmful to the environment. The system should be switched off after the AquaKat has started working. In the dishwasher, the softener can also be reduced. How much it can be reduced varies and must be tested out.

23. Does the AquaKat work with other devices like Grander, etc?

If you install the AquaKat, we recommend disabling or removing other systems.

24. For pipe protection chemicals has to be added to very aggressive water. Is it possible to leave them out now with the AquaKat installed?

A difficult question. If the pH is very low, one has to wait for the AquaKat to take effect and then slowly reduce the chemical doses. In extreme cases it may not be possible to omit the chemical treatment.

25. Do reverse osmosis filters work together with the AquaKat?

Yes. However, the filter cartridges must be well maintained. Also, the AquaKat should be placed after the R.O. filter to revitalize the water again. A common complaint about R.O. water is that since it has essentially been stripped of its mineral content it no longer has a satiating effect (no longer seems to quench one's thirst). Installation of an AquaKat after the R.O. filter will help to overcome this problem – giving the water more taste.

26. The water is treated with UV radiation because of the germs. Does that reduce the effect of the AquaKat?

The effect of AquaKat may be reduced to such a degree that the installation of one more AquaKat is necessary. Must be fitted after the UV filter.

27. There are lead pipes in the apartment. Is that a problem?

Neither the AquaKat nor the ThermoKat should be used with lead piping.

28. According to the description, deposits in the pipes may dissolve. Do large quantities of these then end up in the body? Is it necessary to install a filter?

When old deposits are released from the pipes, they usually come out as larger platelets that are caught in the aerators. The fine dissolved lime particles increase the hardness temporarily. They dissolve in small quantities over a longer period of time, so an additional filter is not necessary.

Tip: let the water run longer to flush the dissolved particles out.

QUESTIONS REGARDING THE EFFECT

29. By how many degrees is the water hardness reduced after mounting?

The hardness remains the same; it may even rise a bit temporarily when lime deposits are released from the pipes. In almost all cases the AquaKat brings about a stabilisation of the hardness, but no softening. However, the water feels a lot softer after installation of the AquaKat.

30. What happens to the lime?

Hardness stabilisation is a physical process by which the crystallisation behaviour of the water components changes in such a way that the crystals do not form chains or clumps. Also they do not form aggressive lime scale anymore.

31. How can you check the effect?

You can compare the initial condition with the condition after installing the AquaKat. Here an example:

Problems with lime scale deposits? (Please tick)

BEFORE:	very big <input type="checkbox"/>	big <input type="checkbox"/>	not much <input type="checkbox"/>	none <input type="checkbox"/>
AFTER:	very big <input type="checkbox"/>	big <input type="checkbox"/>	not much <input type="checkbox"/>	none <input type="checkbox"/>

32. How often is it necessary to thoroughly decalcify household appliances?

BEFORE:	1. aerators	2. pots	3. coffee machines	4. fittings
5. _____	interval:			

AFTER:	1. aerators	2. pots	3. coffee machines	4. fittings
5. _____	interval:			

Which subjective changes did you experience with ...?

Removal of lime, water colour (clearer), water taste, food (taste), detergent (savings), laundry (softer), easier to clean, skin and hair (feel, look, maintenance), plants (appearance, health), animals (appearance, well-being), etc.

33. It works well, but there are still hard deposits in the pressure cooker and in the water kettle, why?

In a pressure cooker there are temperatures above 100 ° C and enormous pressure. Under these conditions, the lime scale starts forming again.

Residual water is often left in the water kettle and boiled again. The revitalisation diminishes

over time. So this „old“ water with its lime forms a small deposit that builds up over time. Therefore empty the kettle fully after boiling and rinse if necessary

34. Can it be that the effect of the AquaKat fluctuates?

If the effect varies, it is mostly due to these factors: Change in water quality, connection and disconnection of electrical equipment in the area where the AquaKat is mounted (sources of interference), habituation to the effect, formation of deposits between the mounting clamp and the pipe (must be removed).

If the fluctuations happen continuously, contact the seller.

35. After 2 weeks, still no noticeable difference?

Then several factors need to be checked into: Where and how is the AquaKat fitted? What were the expectations? Are there sources of interference and / or other devices nearby? The water quality, water quantity and the pipe material have an impact on the effectiveness. It is recommended to uninstall the AquaKat, to clarify the issues and to install it again a week later; it might also be necessary to fit a second AquaKat.

36. After two months the AquaKat does not work anymore!

Again, several factors need to be clarified: Have new (electrical) devices have been put into operation? Is the water supply different (ask waterworks, new appliances, different mix, etc.)? Is the AquaKat properly mounted or perhaps fallen down? Have deposits formed between clamp and pipe? Have large amounts of water been used? Have you already gotten used to the good quality? Is the lime structure the same again? When in doubt, it is also advisable here to dismount the AquaKat and fit it again after two weeks. Also a vinegar test is recommended! A replacement of the AquaKat can only then be taken up for consideration (see also questions 34 and 35).

37. The water is all of a sudden brown. Why?

This is a very positive effect! Lime and other material such as iron (rust) are released from the pipes. During this time, the pipes should be frequently and thoroughly flushed.

38. The aerators and filters are clogged.

Unscrew and remove the deposits.

39. Is it safe for babies to drink the tap water again when the AquaKat has been installed?

That depends solely on the quality of the water supplied. Many substances are not recognized in a simple analysis (15 parameters).

WARRANTY AND LIFESPAN

40. How long is the warranty?

30-day return period with money-back guarantee. 5 years on workmanship and materials.

41. How long does the AquaKat keep working?

According to experience so far at least 17 years.

42. Product Liability Act?

The AquaKat was developed for water revitalisation. The side effect of hardness stabilization is not a promise, but a possible side benefit.

QUESTIONS ABOUT SPECIFIC AREAS OF APPLICATION

43. Can the AquaKat be used to vitalise the water in swimming pools?

In swimming pools, etc. the AquaKat is mounted on the circulation pipe. An additional AquaKat can be installed on the central fresh water supply.

44. How many AquaKats does one need for a swimming pool?

The number of AquaKat depends on how much fresh water is exchanged daily. Up to 3 cubic meters of fresh water per day = 1 AquaKat L. For larger amounts 2 or more AquaKat are required. (See equipment list for swimming pools).

45. Problems with germs in the swimming pool?

Because of the vitalisation also a change of milieu for germs takes place. As a result, an environment may be created in which the germs do not feel comfortable. The effect has to be monitored.

46. Can you leave out the chlorine?

For public swimming pools there are regulations regarding this. A reduction of the chlorine is still conceivable. Under constant control a more optimal, new dosage can be found. Generally „normal“ swimming pools cannot be operated without the addition of chlorine. They lack natural filters (algae, vorticella, etc.).

47. Can the AquaKat be used in air conditioning systems?

Yes. If the system is operated under high pressure and high temperatures an additional AquaKat should be installed.

48. Can the AquaKat be used in industrial plants?

The AquaKat was developed specifically for the domestic water supply. The commercial and industrial use must first be discussed with the manufacturer. Various fixtures are available.

49. Does the AquaKat also help with Legionella problems?

For problems with Legionella, sanitation (thermal or chemical) is the first and most important measure. The AquaKat should only be installed after sanitation and verification thereof has been done. In general one has to make sure that the pipes/tubes, in particular also the hot-water line, are flushed regularly and that filter systems are cleaned and properly maintained.

50. Sales arguments

- Vitalised tap water with spring water properties
- Better taste
- Always available, fresh from the tap
- No transport
- Reduced expenses
- Better skin tolerance
- Protection of pipes and appliances
- Solves problems with lime and corrosion naturally
- Minerals are preserved, only the structure is altered
- Safety by stabilising and increasing the water hygiene
- Vitalised water has greater powers of bringing order
- The water, also industrial water, is more stable and does not go bad as quickly
- No additional costs
- Maintenance free
- Low acquisition price
- Distinguishing criteria compared to other methods
- Composition of the water is not altered
- Self-healing power of the water is promoted
- Treatment is done on the water molecule chain even if it is inert
- No chemistry, no salt, no magnet, no external energy

Agriculture:

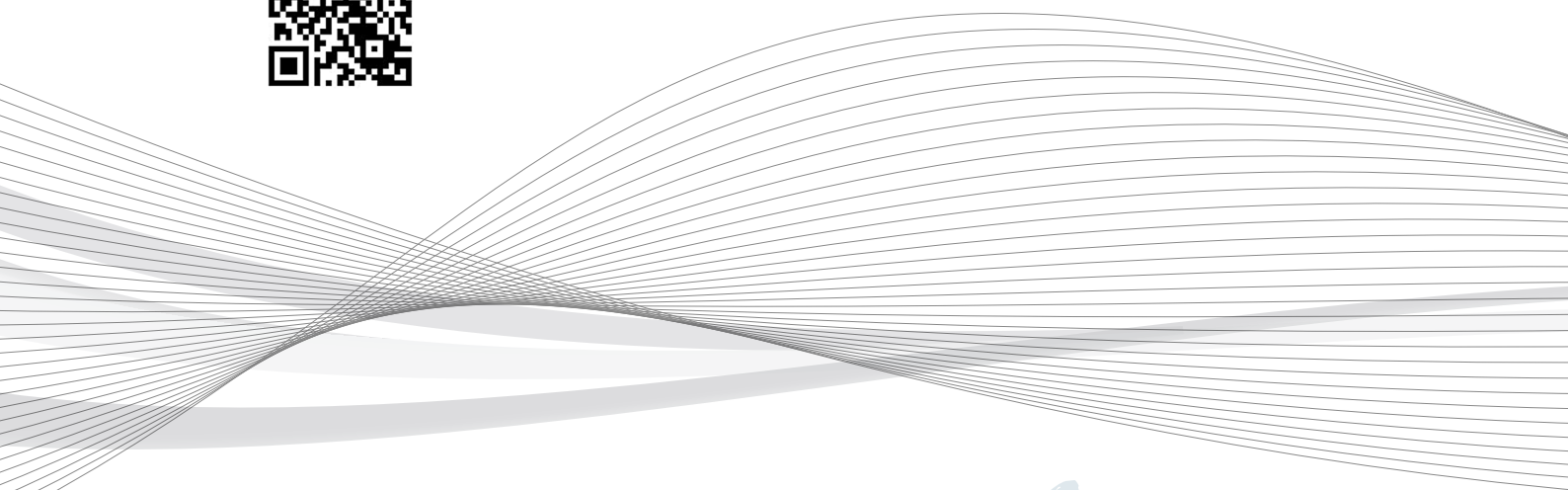
- Increased water intake of the animals, especially of calves
- Less soiling of drinking bowls
- Softer, structured water
- Improved taste

Contact

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A series of thin, overlapping, wavy lines in shades of gray that flow horizontally across the middle of the page, creating a sense of movement and depth.

natural
the natural biotechnology