## h y d r o g e n w a t e r





## The hydrogen revolution

Hydrogen is the chemical element with atomic number 1. It is the lightest of all elements and the most abundant in the universe, though not in the Earth. Hydrogen is quite common in nature in combination with other elements such as oxygen, carbon or nitrogen (it is a part of water, the human body, plant and animal organisms, etc.).

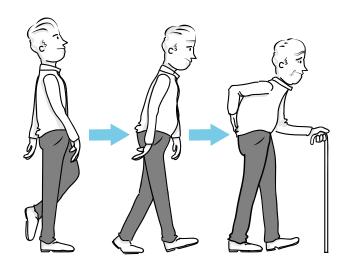
In our everyday life we come into contact with numerous chemical compounds and consume food with a high oxidative capacity. Hydrogen-enriched water has a high antioxidant capacity, which makes it an element contributing to a healthier lifestyle.







## ¿What are free radicals?



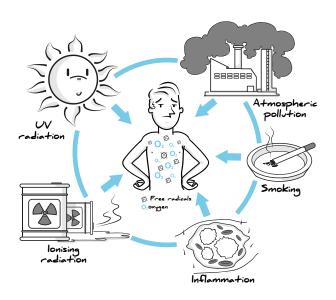
## Just by living our bodies oxidise

Scientists have found that the oxygen which acts in our metabolism generates free radicals.

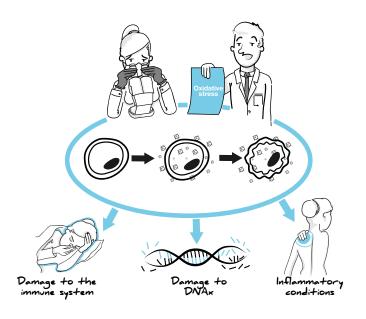
They are molecules which lack electrons and so, they steal them from other molecules causing damages in different cellular structures such as DNA.

## ¿Why do they occur?

- Smoking.
- Atmospheric pollution.
- Inflammation.
- UV radiation.
- ionising radiation.



## ¿Which cellular damages may they trigger?



- DNA damages (genetic).
- Damage to the immune system.
- Premature ageing.
- Inflamatory conditions.
- Other various illnesses.

#### Oxidative stress

## -

- Own metabolism.
- Intense sport.
- Air pollution.
- Type of diet.
- Ultraviolet radiation.
- Others.

# CONSEQUENCIES

- Possible non-hereditary damage.
- Possible damage to the immune system.
- Inflammation.
- Premature ageing.
- Others.

## According to numerous studies, consuming hydrogenated water helps improve more than 175 conditions:

- Wrinkles.
- Cystitis.
- Allergies of type 1.
- Fibrogenesis.
- Combats endotoxins.
- Helps in recovery after smoke inhalation.
- Regulates and normalises the parameters of metabolic syndromes.
- Helps in hyperlexia.
- Peridontitis.
- Gastric ulcer.
- Ulcerative colitis.
- Erectile dysfunction.
- Osteoporosis.
- Muscle fatigue.
- Metabolic acidosis.
- Asthma.
- Neonatal hypoxia.
- Carbon monoxide poisoning.
- Extension of the lifespan.
- Sperm mobility.
- Fibromyalgia.





The antioxidant power of 1.5 L of hydrogenated water is equivalent to consuming:



## Everything you need to know about Hydron

#### 1. Which are the beneficial effects from drinking hydrogen-rich water?

It acts as an antioxidant by counteracting the effects from free radicals

#### 2. How much water should we drink every day?

Healthy people should drink within 1 and 3 litres per day. It is recommended to drink it on an empty stomach and between meals.

#### 3. Is it suitable for cooking?

It can be used without any problem, but when heated it quickly loses the hydrogen and all its antioxidant effects, therefore it makes no sense.

#### 4. Can we take hydrogen in excess?

Hydrogen evaporates over time and is expelled through the airway.

#### 5. Can I use Hydron to hydrogenate any water?

No, it must be of a very low mineralisation or come from a reverse osmosis.

#### 6. Can I use Hydron to hydrogenate milk, juices or other liquids?

No. the equipment would break down

#### 7. Can I hydrogenate cold water?

Yes, it actually improves hydrogen solubility

#### 8. Can I store hydrogenated water in the fridge?

Yes, inside a stainless steel thermos flask, by filling all the available volume and without leaving any air chamber inside. Do not use any other type of containers, since hydrogen would get lost.

#### 9. Does hydrogenated water taste different?

No the taste and the odour remain the same

#### 10. Is Hydron a water purifier?

No, therefore we must use water suitable for human consumption with a very low mineralisation.

#### 11. How long does it take for hydrogen to evaporate from hydrogenated water?

Within 1 and 2 hours in an open container. If stored in the fridge, inside a stainless thermos flask without any air chamber, it wil last for several days.

#### 12. Is there any contraindication to its consumption?

There is no contraindication to the consumption of hydrogenated water.

#### 13. Can hydrogen replace other antioxidants?

It is recommended to supplement the antioxidant effects of hydrogen with a balanced Mediterranean diet

#### 14. Is hydrogen safe?

It is considered a food additive in the EU and it has been approved by the FDA. Our organism produces hydrogen from fibre in the intestine and, since 1945, it has been used in high concentrations without any problems for professional diving.

#### 15. When were its benefits discovered for the first time?

Some records from 1/98 have proofed its anti-inflammatory effects.





## Versatile and functional equipment

Hydron has been designed to take up as little space as possible in the kitchen. It offers several installation possibilities for you to choose the one that best suits your needs.

1. Work surface top installation (Two options available):

#### Option A

Hydron can be installed on the work surface of your kitchen by connecting it to a high quality water network or a reverse osmosis equipment.

#### Option B

It can also be installed with an electrical connection and a hydraulic supply by using a 3-litre glass bottle. This water may be osmosis water or bottled water with a very low mineralisation,

meaning you will always have access to hydrogen-rich water (hydrogenated water) whenever you want it.

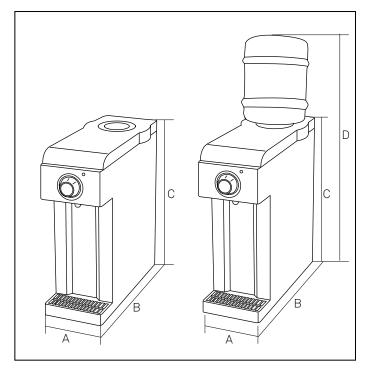
For this second type of installation, you must purchase the bottle kit model (bottom right picture).

#### 2. Below work surface installation:

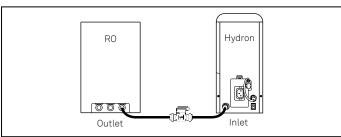
Hydron + reverse osmosis in your 1, 2, 3 or 4-way tap. Meaning you will have access to hydrogen-rich, osmosis hot and cold water according to the tap installed.







H2	Hydrogen generation.
ORP	Redox potential reduction (ORP).
	Easy installation under and over the sink
X	Easy maintenance.
X	It does not treat tap water.
	It treats filtered / RO / mineral water.



## Technical Specifications

Dimensions (A x B x C): 148 mm x 360 mm x 360 mm

Dimension (D): 575 mm (Only Option B - Work surface top

installation.)

Weight (in kg): 4.5 kg (empty) Power supply: DC 24 V / 5 A

Working pressure (min. – max.): 1 bar–5 bar Working temperature (min. – max): 5°C–35°C

TDS (min. - max): 10 ppm-150 ppm

Hardness (max.): < 10°HF Chlorine: chlorine-free.



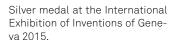
- 1) Concentration of H2: > 1000 ppb (\*).
- 2) ORP: < -400 (\*).
- (\*) In function of the characteristics of the water to be treated.

\*Common features in all models.

## Research and development at the service of health

Thanks to its design, Hydron has been awarded with various prizes at international exhibitions.

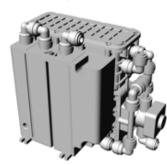






Bronze medal at the Seoul International Invention Fair 2015.

High-tech cell with Great direct production.



## 4

## Not all hydrogenators are real hydrogenators

There is a proliferation of new equipment in the market, which promise to generate hydrogen and negative ORP, however its manners are not very orthodox. These systems normally use ceramic balls and other filter media whose content and manufacture is unknown. Therefore, they can hardly justify compliance with applicable legal requirements.

Filter media used in water treatment are defined and regulated in Royal Decree 140/2003.

Hydron produces hydrogen via the same electro-chemical system that has been used in the industry for years. This system does not contain any filter media to generate hydrogen and reduce the redox potential.

Hydron complies with all the requirements of the standard UNE 149101 'Water conditioning equipment inside buildings. Validation of equipment used in the treatment of drinking water in the interior of buildings', which demonstrates compliance with the legal requirements established by Royal Decree 140/2003, February 7th, establishing the health criteria of water quality for human consumption, after being tested by independent laboratories.

### Quality Assurance





Puricom Water Industrial Corporation and Ionfilter (B-60326279) are members of Water Quality Association.



The quality system of lonfilter (B-60326279) for the marketing and assembling of the water treatment equipments is certified and fulfils the requirements of the norm UNE-ISO-9001.





Puricom Europe belong to Aqua Spain's group, member of Aqua Europe (European national associations federation).

