

DRINKING WATER AND WATER TREATMENT SCAMS

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OBJECTIVE

To make the audience more aware of the various types of scams associated with drinking water, how to recognize a potential scam and how to deal with scams.



INTRODUCTION

- What is a scam?
- Who is susceptible to being scammed?



COMMONDRINKING WATER SCAMS

- Bottled water scams
- Health quackery scams
- Water testing scams
- Water treatment scams
- Water supply scams



UNDERSTANDING AND RECOGNIZING SCAMS

- Why scams work
- Understanding science
- Basic characteristics of scams



DEALING WITH SCAMS

- Reporting scams
- Learning more about scams



Introduction

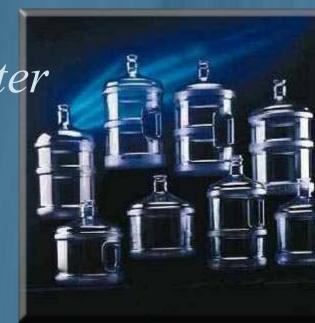
- What is a scam?
 - Purpose
 - Trickery
 - Fraudulent activity
- Who is susceptible to being scammed?
 - Everyone
 - Science illiterates are easier prey



Bottled Water Scams

Bottled Water Is Better Than Tap Water

- When is bottled water a scam?
- Does bottled water have advantages?
- Does tap water have advantages?
- What do independent studies reveal?





Bottled Water Scams

Water to Enhance Sports Performance

- Most sports drinks are not bottled water.
- Super-oxygenated bottled water
- What have university studies revealed?





Bottled Water Scams

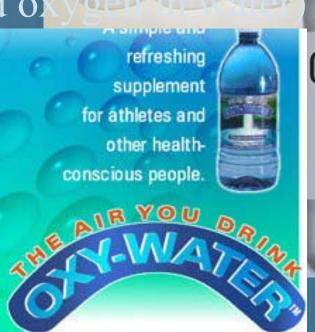
The Facts on Oxygenated Bottled Water

- Pressure will add more oxygen to water
- Oxygen dissipates fast once bottle is opened
- Digestive system not effective for oxygen uptake
- Does not really work unless you have gills
- Taking deep breaths more effective



Highly Oxygenated Water

- Stabilized oxygenated water
- Extra oxygen bonded to water molecular
- Oxygen entrapped in microencapsulated water clus
- Vitamin O (electrically activated or
- Nascent (ionic) oxygen in water







Claims About Highly Oxygenated Water

- Shrinks water molecules to hydrate your body faster
- Promotes better health from cell waste removal
- Retards aging
- Boosts physical energy
- Many other health benefits



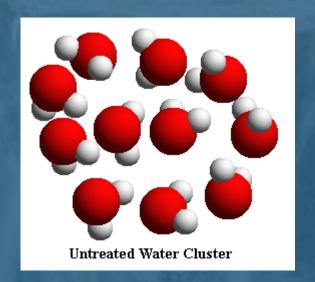
Real Facts About Oxygenated Water Quacker,

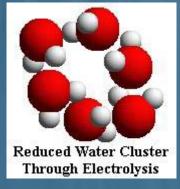
- Oxygen does not travel freely in blood
- Diatomic oxygen is toxic to living cells
- Ionic forms of oxygen are even more deadly
- Ionized forms of oxygen have very short life



Structure-Altered (Clustered) Water Scams

- What are water clusters?
- Two categories of cluster quackery:
 - More and bigger clusters are beneficial
 - Smaller and fewer clusters are beneficial







Healing Forms of Clustered Water Found in Nature

- Polymer water from isolated mountain springs
- Hydride ion water from high altitude glaciers
- The real story





Clustering Water with Magnetism

- Healing benefits of magnetism
- Permanent magnets and electromagnets
- Liquid crystalline water
- Hexagonal polygons with memory
- The real story



Changing Water Structure with Electrical Energy

- Micro-clustered water from electrolysis is the best
- Alkaline, ionic or ionized water to treat acidosis
- Dodecahydronal (12-plane) clusters that kill viruses
- H₃O.OH lowers cell entropy and kills cancer cells
- The real story





Changing Water Structure with Light Energy

- Adds molecular vibration energy
- Has special healing power
- Controls all addictive behavior
- The real story

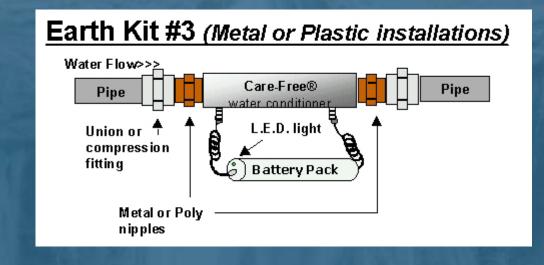




Structured Water Produced by Catalytic Processes

- Supercharged water with mystical properties
- A little bit goes a long way (homeopathy)
- The real story







Sound Waves and Electrolysis to Un-cluster Water

- Large clusters impede water flow into and out of cells
- Small clusters improve cell hydration
- Small clusters better at flushing waste
- The real story



Light Wave Energy Water

- Special minerals carry light energy signals
- 26 formulations to trigger different responses
- The real story



Water Testing Scams

Three Types:

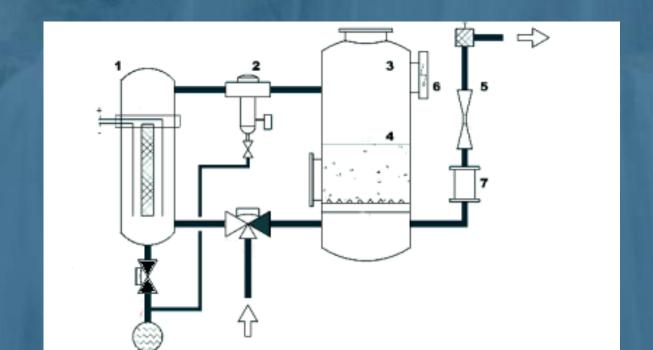
- On-site demonstration tricks
- Fake lab test results
- Misinterpretation of laboratory results





Two Categories:

- Consumers purchasing treatment devices not needed
- Consumers purchasing treatment devices that do not work





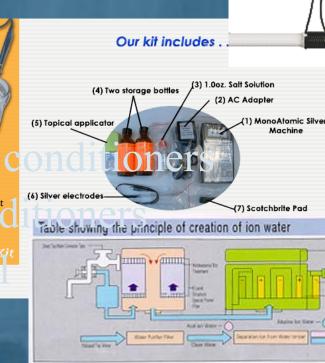
Treatment Devices Not Needed

- Consumer Exploitation
- Consumers know little about water treatment
- Chemical scare tactics are effective
- Consumer Confidence Reports help filter sales
- Installed treatment systems can cause problems
- Companies offer maintenance agreements



Treatment Devices That do not

- Hard Water and Scale Treatm
- Magnetic and electromagnetic
- Electronic and electrolytic wa
- Depressurizing units for scale
- Catalytic devices for scale control
- Oscillations (vibrations) to prevent scaling
- The real story





Treatment Devices That do not Work

- Light Related Treatment Devices
- Far infrared (FIR) nonsense
- Photonic ionization
- The real story



Treatment Devices That do not Work

Bacteriostatic Filters

- What are these?
- Why are they registered with EPA?
- Do they really work?



Treatment Devices That do not Work

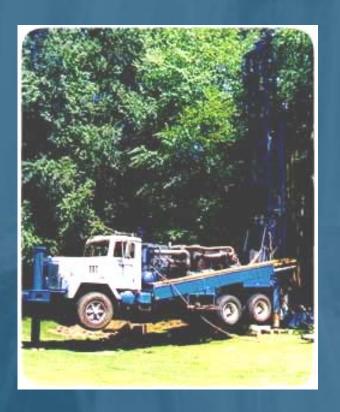
REDOX Magic

- What are these devices?
- Do they really work?



Water Supply Scam

- Water Location Scams
- Well Drilling Scams
- Rain Making Scams





Why Scams Work

 Human nervous system is designed primarily for survival, not to assure truth, logic and reason.



Why Scams Work

- Human Survival
- Humans are sometimes prone to be superstitious and use irrational thinking.



Why Scams Work

- Human Survival
- Human Irrationality
- Humans are frequently gullible to beliefs in telepathy, astrology, and a wide array of paranormal and supernatural phenomena.
 - Science education ≠ logical thinking
 - Science education ≠ critical thinking



Why Scams Work

- Human Survival
- Human Irrationality
- Human Gullibility
- A high percentage of the general public is scientifically illiterate and cannot tell the difference in real science and pseudo-science.



Understanding Science

- What is pseudo-science?
- Where does pseudo-science come from?
- How can you tell fake science from real science?

Identify the pseudo scientist:

- a. A
- b. B
- c. Both
- d. Neither
- e. All of the above
- f. Some of the above





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Basic Characteristics of Scams

- Sound too good to be true
- Not based on clear proven scientific principles
- Have no peer-reviewed reputable support literature
- Have testimonials from crackpot pseudoscientists
- Have fake testimonials from satisfied customers
- Pressure to purchase or invest immediately



Where and How to Report Scams

- Local and state officials
- Federal authorities
- Internet sites



Reporting Scams

- Any Type of Scam
 - Local sheriff
 - State attorney general
- False Health and Product Labeling
 - U.S. Food and Drug Administration (FDA)
- Fraudulent Mail
 - U.S. Postal Service
- Fraudulent Marketing
 - U.S. Federal Trade Commission (FTC)



Reporting Scams

- Filing Complaints on the Internet
 - U.S. FDA
 - http://www.fda.gov/medwatch
 - U.S. Postal Service
 - http://www.usps.com/postalinspectors/fraud/Mail FraudComplaint.htm
 - U.S. Federal Trade Commission
 - http://www.consumer.gov/



- Local and state sources
- Federal sources
- Other sources



- Local and state sources
 - Governmental offices that deal with consumer protection
 - County Cooperative Extension Offices
 - Consumer Protection Unit of state Attorney General's Office



- Federal sources
 - Federal Citizen Information Center (FCIC) <u>http://www.pueblo.gsa.gov</u>
 - Bureau of Consumer Protection of Federal Trade Commission http://www.consumer.gov



- Other sources
 - The Consumer Fraud Watch Network http://www.consumersgroup.com/crimewatch/
 - Net Scams Online Protection http://www.netscams.com/scams.jsp
 - National Fraud Information Center http://www.fraud.org/
 - Legal information on scams and fraud http://cobrands.public.findlaw.com

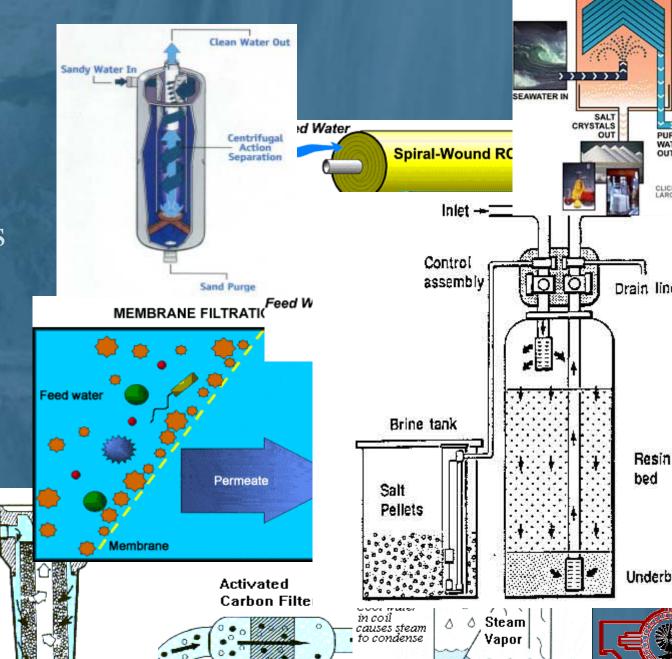


Not everything is a scam

- Some valid water treatment methods
 - Water softeners
 - Membrane systems
 - Reverse osmosis

Inlet

- Electro-dialysis
- Water filters
 - Particulate
 - Adsorption
- Distillation
- Desalination
- Centrifugal units





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Questions?
Recommendations?
War Stories?