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MENTOR SESSION

What is in our water!?

Welcome back to another installment on water...

Brace yourself... this session is quite long. This is because there are several crucial and foundational principals that you need to grasp, so grab a cup of tea and enjoy the read!

Let's recap on our previous session: -And finally, we looked at the good habit of keeping

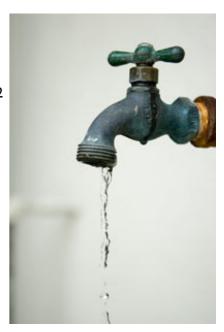
-We looked at how much water your body consists of and how essential water is in your body.

-You got all excited (I hope) when you read that water actually helps weight control, prevents colds and flu

and can play a part in the prevention of heart disease!

-We also discussed how 2 liters of water a day is a rough estimate of your needs but that everybody actually has his own individual need to work out.

-And finally, we looked at the good habit of keeping a water bottle at hand throughout the day...



So, what's in YOUR tap?

Scientific rationale

Allow me to say something before I discuss all the issues with water...

Many times there may not be hundreds of studies in peer reviewed journals about a specific topic but there is always **scientific rationale**. With that I mean that you can employ good scientific thinking to come to conclusions that are reasonable. Scientific rationale protects us when weird and wonderful new therapies see the light that have zero scientific rationale behind them or when older practices like water chlorination/fluoridation have a disturbing rationale behind them!

The same is obviously true when a promising new therapy becomes available that has a good safety profile and to which we can apply scientific rationale.

So, just as I am open to the advances in medicine and specifically natural therapies I am also guarded to make sure that we're moving in the right direction.

Chlorine

We all know that chlorine is used in the purification of water. Some of us have even carried chlorine-based water purification tablets with us on hikes for just in case we run out of water and need to 'clean' water from a river.

BUT, chlorine is actually very toxic and has even been used in chemical war-fare!

It is placed in municipal water supplies because it is good at killing living things like bacteria and other organisms. But think about this for a second...

If chlorine kills bacteria and other organisms in water, don't you think it will keep on killing other (good) organisms after you drank it? I'm referring specifically to the healthy intestinal bacteria in your body that have amazing health benefits like more energy, better digestion, less constipation or diarrhoea, increased immunity, fewer allergies etc, etc.



Damaging effects of chlorine

The research is clear. Excess chlorine over a period of time can cause the following:

- I) Miscarriages and birth defects like small for gestational age, central nervous system defects, oral cleft defects, and major cardiac defects.
- 2) Colon, rectal and bladder cancer risk as well as cancer risk in general.
- 3) Average human sperm counts have dropped in Denmark by almost 50 percent
- (Dr. Niels Skakkebaek, University of Copenhagen)
- 4) Skin problems and worsening of existing skin problems ⁹

Chlorine in drinking water has been linked to the occurrence several birth defects





Where does it occur?

Exposure to chlorine happens everyday. Here is where you're exposed:

- I) Municipal water supplies
- 2) Canned soft drinks
- 3) Restaurants that use tap water

- 4) In some 'mineral' waters
- 5) Inhaling chlorine metabolites in the shower ^{4,5,6,7,8} or skin exposure while bathing ^{4,7,9}
- 6) Skin exposure while swimming 9

What to do?

- A) Purify your own water with at least a 3-filter system.
- B) If possible you can fit chlorine filters to your shower and bath taps.
- C) Try to use salt in your swimming pool and minimize the use of chlorine.

Fluoride



After my mouthful on scientific rationale at the beginning of this article let me then start with some rationale about fluoride.

In the 1930s American dentist Weston Price traveled the world to study the diets of 'primitive' peoples. What he found were people who were healthy with healthy teeth and gums. At the University of Pretoria studies have also been conducted that showed the difference

between the healthy teeth of people who live in far out rural areas versus those that are closer to the big towns.

The difference between these rural dwellers and city folk? **Their diet of course!** The rural people in these studies eat less or no refined carbohydrates and sugars and they stick to the age-old formula of having raw fruits and vegetables and grains that are eaten with all the fibre still present!

(Note: Here's the scientific rationale...none of these people groups drink fluoride or use fluoride tablets!)

Fluoride—information chaos

Whatever you've heard or read about the so-called 'fluoride debate' I would like to be bold and say that after reading the next few lines the debate is over!

Summary of the literature:

I) Magnesium:

Use magnesium as supplement. It works better than fluoride to strengthen your teeth and bones and is non-toxic.

2) Refined foods:

Children raised on whole grains have 50% less dental decay as children who have taken white flour and fluoridated water since birth (British study: 'Better Diet vs. Fluoridation', Albert W. Burgstahler, Ph.D., Professor of Chemistry, University of Kansas, Nov. 1967)

-Want to have a family with healthy teeth and bones: DON'T eat refined foods... period!

Focus on having a diet based on raw fruits and vegetables, seeds and nuts, grains with their fibre and less meat.

3) Toxic:

The toxicity of fluoride is comparable to that of arsenic.

4) Toothpaste:

Be **VERY** careful with fluoridated tooth-paste: There is enough fluoride in one tube of toothpaste to kill a small child. Yes, you read that right. In the USA toothpaste tubes have to have warnings on them that the product is poisonous. O yes, before I forgot, we and our children put this poison into our MOUTHS twice to three times per day. Thus store fluo-



ride toothpaste and mouthwash away from children and make sure children spit out fluoridated toothpaste after brushing.

Bone health:

Increase in hip fractures in towns that receive the most fluoride. ^{10,13}

Other problems:

Perioral dermatitis and acne like eruptions linked to fluoridated toothpaste use. 11,12

Final nail...



Now in summary let's see what the recommendations were from a published review in the Journal of American Physicians and surgeons in 2005: 13

- -'There is evidence that fluoridation increases the incidence of cancer, hip fractures, joint problems, and that by causing fluorosis it damages both teeth and bones. Other medical problems may also occur, including neurological damage.
- -The FDA should reverse its position on permitting sale of products containing fluoride that claim dental benefit without proof of safety or effectiveness.
- -Fluoridation of municipal water should cease.
- -Individuals should remove fluoride from their tap water if fluoridation cannot be stopped.'

Case closed. No more fluoride in your water and also not through tablets.

A smelly issue...

Sewage contamination of underground water sources has become a real concern in several countries in the world, including South Africa. ¹⁴

This problematic issue came quite close to home for me when a prominent South African newspaper reported in 2003 that one of the major dams providing water to parts of Pretoria was in serious danger of underground sewage contamination due to town planning mistakes made years previously.





Boreholes

Just because you have a borehole doesn't mean you have clean water. A resident of Gauteng once informed me that his borehole only provided him with sewage contaminated water and he was drinking it for several months until he realised it!

If you have a borehole have the water tested!

Other pollutants

Other possible pollutants in water:

I. Aluminium:

Some water sources are contaminated with aluminium which has been associated with an array of neurological problems including Alzheimer's disease. ¹⁵

2. Asbestos:

Has been recorded in the water of some American cities.



Endocrine disruption

you need to fasten your seatbelt! Look at the following conditions **Endocrine disruption is a serious** concern that I will come back to in later editions, but a few facts for now...

Endocrine disruption is basically when you consume a hormone or hormone -like substance that then messes up your own hormonal system.

This is happening increasingly in cities all over the world and because of most of these endocrine disruptors having an estrogenic effect (female hormone effect) the men of our time are in grave danger!

How do we know the men are being

Now if you're not freaked out yet affected by these endocrine disruptors? Other problems: that are on the increase:

- I) Deterioration of **sperm quality** (16) start to develop over the long term.
- 2) Increased incidence of testicular cancer (16)(17)
- 3) Increase in cryptorchidism and hypospadias cases (Undescended tesicles and abnormally small genitals)
- 4) Alteration in **sex ratio** (fewer boys are born)
- 5) Testicular dysgenesis syndrome (TDS) (Incorporates sperm quality, hypospadias, cryptorchidism and testicular cancer) (16)(17)

In men: -Impotence. (16) -Female bodily characteristics could

In women: A general interference with healthy hormonal functioning.

Where are the hormones coming from!?

Contraceptives:

17-a-ethinylestradiol is a female hormone that is used in many contraceptive medications and it survives the municipal purification plants and can last for several weeks in the water that is recirculated for use by the population. This is how many men who live in cities and towns ingest female hormone on a regular basis. 17

Fungicides:

Certain fungicides that are used liberally on crops contain chemicals that block the working of testosterone in your body. Their use on large plantations facilitate their occurrence in the environment. 17

Industry:

Industrial toxins like dioxins and PCB's are also endocrine disruptors. 17

Medication:

Some medications can cause it as well especially hormonal treatments given to pregnant women.

These treatments affect male fetuses before birth.



Animals feel it to



Animals and human hormones:

Prof Gerhard Verdoorn, who is the conservation director of the Conservation Wildlife trust, has noted recently that hormones in water supplies are a serious concern and that wild Guinea Fowl in some cases are not producing offspring for several years because of

Prof Verdoorn feels people should find alternative ways of contraception.



When the water is clean but the bottle isn't...

So after all this you may be purifying your water beautifully but you could be poisoning yourself with the plastic bottle that you're using over and over again!

P.E.T. plastic bottles, which are the bottles most mineral waters are sold in, have the tendency to give off certain toxic molecules into water and more so when you re-use them and wash them repetitively in warm water with soap.

Carbonyls are given off into the water like formaldehyde, acetaldehyde, propanal, nonanal and glyoxal (all toxic substances).

Antimony has also been identified as a pollutant in bottled water.

I don't know about you but I prefer not to drink carbonyls or antimony...

The other problem is that if you don't wash your favorite water bottle all kinds of bacteria and moulds start to grow in it and then you're drinking more than what you bargained for!

So a solution to both issues is to switch to good old glass. Yes, it can break, but it's MUCH healthier! 18,19,20,21

Purification

If you are going to purify then do it properly:

Have a filter that, at the minimum, has the following:

- 1. Activated carbon/charcoal filter
- 2. Reverse osmosis filter

This is the absolute minimum but if you can afford getting the deionisation modules and other filters as well then go for it.

Start up:

If you can't afford a proper purifier as yet then the cheapest way to at least remove some impurities is to boil your water for 10 minutes and when it's cooled down pour it through a purification jug.



Yes, it's a huge amount of information and it feels like everything we're exposed to is toxic in a way!

Freaked out?

But let's remember the motto of the mentoring programme. 'We live by a new set of rules', and that definitely also applies to water!

All the best in changing your water habits!

Dr Anton

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About Dr Anton



Dr Anton Janse van Rensburg is a practising medical doctor who has devoted himself to the study of unique, scientifically sound solutions to modern diseases. He is also a qualified metal toxicologist and has a master's degree in Applied Human Nutrition.

He has written on a variety of wellness topics for numerous South African magazines and newspapers and in 2009 co-authored the book 'Diamonds in the Dust – crafting your future landscape'. Dr Anton is no stranger to radio and has been able to guide scores of listeners with his passion for wellness education.

Dr Anton is an established public speaker and is also a wellness coach to company executives. He specialises in motivating people to adopt healthier habits through well researched lifestyle and food approaches.

Want more!?



Dr Anton



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