Eileen had good intentions submitting the following article she got from the internet, written by Oliver Childs, Bath Univ, UK on March 24, 2014. It is internet declaring 10 myths called:

"Don't believe the hype – 10 persistent cancer myths debunked"

Some of what Oliver wrote is quite correct, some parts are extremely wrong. The comments are in this color text:

10 PERSISTENT CANCER MYTHS DEBUNKED

Google 'cancer' and you'll be faced with millions of web pages. And the number of YouTube videos you find if you look up 'cancer cure' is similarly vast.

The problem is that much of the information out there is at best inaccurate, or at worst dangerously misleading. There are plenty of evidence-based, easy to understand pages about cancer, but there are just as many, if not more, pages spreading myths.

And it can be hard to distinguish fact from fiction, as much of the inaccurate information looks and sounds perfectly plausible. But if you scratch the surface and look at the evidence, many continually perpetuated 'truths' become unstuck.

In this post, we want to set the record straight on 10 cancer myths we regularly encounter. Driven by the evidence, not by rhetoric or anecdote, we describe what the reality of research actually shows to be true.

We will post the myth as presented and then the comments

The "Myth" articles in detail are at the very bottom after the comments

- Myth 1: Cancer is a man-made, modern disease
 - The most part, Oliver is correct. The foods, lifestyle are major factors. Correct nutrition causes correct metabolism and the DNA will provide correct instructions. He is wrong when he says that DNA is damaged and as we get older that DNA becomes incorrect. The correct answer is that over time of eating poor diets and increased toxic elements into our body, they will alter the DNA instructions, leading to many problems in addition to cancer. By correcting all the mineral levels to their correct proportions to our body, the electromagnetic fields correct themselves, the correct cells are now more functional to become normal again. Previously made incorrect cells and chemistries cannot survive in the corrected environment and die off naturally, no surgery, nor any toxic chemistries are required, the body breaks down these cells and chemistries naturally like any other cell or chemistry, and disposes of them through the lymphatic system.
 - A perfect example is Fred's mother, as you may have read previously, she is 90 years old, perfect health, no medications, sharp as a tack, blood pressure a few months ago was 120 / 71, and she drives her car like she is 30 years old. She takes between 1 2 scoops daily, no diet restrictions, just eats smart food.

The links to 2 articles which explain this in detail are:

- 1. http://fredeichhorn.com/cellularandchemistrysummary.html
- 2. http://fredeichhorn.com/images/0_10_Primary_Discussion_16_1_27_.pdf
- 3. Condensed version of the "Primary Discussion" http://fredeichhorn.com/condensedversionofprim.html
- 4. Helpful links: http://fredeichhorn.com/helpfulinterestinglinks.html
- Myth 2: Superfoods prevent cancer
 - Oliver is correct. These declared "Superfoods" are nothing but marketing hype. These specific foods might have some benefits, but are not super in any way. The most important focus is to get all the minerals in their correct proportions to each other, as mentioned above. The body will do everything correctly when everything is there in the correct manner.
 - "Action Causes Reaction" When you have all the correct materials in their correct proportions, you get the correct electromagnetic atmosphere, causing the correct pH of 7.4, causing the correct attractions and repulsions, causing the correct domino effects, causing the correct DNA instructions, causing the correct manufacture. The previously incorrect material cannot survive and will die off.in a natural manner
 - Sloan Kettering Has CELLECT listed on their site. Go to the link and then choose letter "C" and then scroll down too CELLECT: https://www.mskcc.org/cancer-care/integrative-medicine/herbs/cellect#field-herb-drug-interactions
- Myth 3: 'Acidic' diets cause cancer
 - Oliver is partly correct and partly incorrect. He is correct that "Acidic" diets are not the sole cause of cancer. However, we need to look at the entire picture. The "Action Causes Reaction" events are wrong, the domino effects are wrong, the acidic foods cause a higher deficiency response, leading to more health problems, and if the DNA is giving instructions to make mutated cells, the acidic diet will make that more prominent. Alkaline water is a fad as well, the water character has been altered. As a result, it is not utilized correctly. Juicing is another waste, just to sell more blenders, the pulp has important nutrients, eat the whole thing. Preservatives and processed foods are more of a problem. Soy is bad, it converts to MSG.

Myth 4: Cancer has a sweet tooth

- Oliver is correct that sugar has nothing to do with cancer. However, he is not correct that cancer uses more sugar. The term "Sugar feeds cancer" is so ridiculous it isn't funny. Ironically, when I had my pancreatic cancer, my glucose levels were documented at "6" at 8 different times. 80 120 is normal, 60 is hypoglycemic, 30, you go into a coma, 10, you are basically dead, I was at "6" therefore, there was no sugar available to feed my cancer, in fact, I had to get a lot of sugar into me in effort to stay alive.
- Below is the explanation as to the reason some cells have higher glucose. Most people are not aware that there are 2 types of cells, one for electronic information and one for the cells to create something to happen.
- There are Data cells and function cells. Data cells ate the nerve and brain cells, which their structure consists of less mineral variety and higher amount of glucose to store electronic information. Function cells have a higher variety of minerals available in their structure and less glucose because they are functional, like lungs, muscles skin, bone, etc. When the DNA gives instructions to make a cell, and the deficiency prevents the body from completing the manufacture, the body combines the data cell and function cell to complete the manufacture. The result is a cell that was previously a function cell, now combined and now has a higher glucose level to function. It is a mutated cell. Unfortunately, many doctors were not properly trained to learn this, they incorrectly interpret that the cancer is drawing in more glucose, which is wrong. When the chemistry mineral balance is corrected, the DNA will correct the information, material will be properly available, and the correct cells will be made. These incorrectly manufactured cells will not be able to survive and die by their own starvation. Correct function will resume.

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Myth 5: Cancer is a fungus – and sodium bicarbonate is the cures

- We agree with Oliver 100% with what he wrote. I must add to this, he states that cancer is cause by problems within the cells, which is correct. My information will help explain the detail better. I emphasize this because some people, including a recent video "The truth about Cancer" are declaring that cancer is a microbe going through the body, which is tragically false. If it were a microbe, it would show up randomly in the body. Because they declare it as an outside invader, they apply "Immune Therapy" including chemo, to kill cancer, which is why they have such a high failure rate.
- Fred has done testing during his Surgical Transplant research training, including testing the cancer cells for their "Phenotype" which is like a serial number to the body. All cells made by the body have the same Phenotype, different for each person, similar in families. The doctors never test the cancer cell phenotype. If they did, they would see that it matches the body, which means that the body made that cell, as a mutation, and that it is not an outside invader, nor a microbe.
- Therefore, the chemo is based on the "Immune' treatment" procedure, all it does is kill basic cells, including the cancer cells because they are mutated cells. It does nothing to correct the root source of the cause, and make the body more deficient to cause the next generation to be further from normal than the previous generation of cells. Meanwhile, the doctors reply, "Oh Gosh, it is getting worse" the reason is because the treatment did more damage to the body.
- Radiation also kills the cells and everything in its path. They keep increasing the treatments, when the
 patient dies, the doctors blame it on "Cancer Progression" instead of "Chemo/Radiation Toxicity to the
 body.

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What part of Chernobyl do they not understand ????????

- Myth 6: There's a miracle cancer cure..
 - We agree with most of what Oliver wrote. There are so many bogus "Cures" to the point of criminal with some of them. The most recent upsetting scam is the cannabis garbage. It will reduce inflammation and tumor size in many cases, but for the wrong reason. It interferes with the myelin sheath in the nervous system, interfering with the transmission of information to the brain, which is why the pot-heads are stoned and cannot think nor analyze. As a result, the brain does not get the message that there is a problem, so, the brain does not communicate with bio-feedback to cause a reaction, and therefore, the swelling reduces. Unfortunately, people incorrectly thing that is a good thing. Instead, the problem might clear up a little, which is why people and kids feel relief, but, the root source has not been resolved,
 - Over time, the incorrect body chemistries generate new problems, but the doctors and patients do not properly relate that the cannabis is related to the new problems. I see so many people who get new problems as a result, and mot do not care because the cannabis makes them "Not Care" that they have a problem. We want nothing to do with anyone interested in cannabis. It does nothing to properly resolve the root source of the cause of the problem.
 - Back in the 1980's, with the transplant work, Fred did experiments with organs, nervous systems, etc. There was testing done with cannabis back then to see how it affected cancer. They saw how the tissues were eroded and breaking down, as the nerve function was hindered. When they had transplant recipients, during surgery, their body had a different coloring, like a sick person. Donors who used pot revealed organs with nerve conductivity issues. It was clear that devastating damage to the nervous system took place. It got to the point where the department politely refused donors and recipients who took pot or cannabis, in addition to other drugs. Fred looks at people today who use it as "Recreation". Do they not see what it is doing to them. It is quite evident that people do not care about the potential damage to their body, they only want the immediate so-called pleasure. We do not understand how they can call it "recreational" when it causes such biological harm.
 - Also, the sad fact is that many people want to have it legal so that they can smoke it and not get arrested,
 that is even more sad, these people do not realize what it is doing to their health, mind, etc, and that it
 causes lung cancer. We know that there are now other forms, but, either way, it is dangerous to our health.
 - Now they are trying to push it on kids as a treatment, which is disgusting. There is a reason it is illegal, and
 it should remain illegal, otherwise, it will become the ruination of our country.
 - o OUR RESPECT FOR OUR BODY is based on what we put in it

Myth 7: ...And Big Pharma are suppressing it

- We respect what Oliver wrote, but we do not agree with what he wrote. The pharmaceutical companies are more interested with what they can sell on the market than looking for the most correct application.
- The part he is correct about is that there are soooooo many scam type programs promising cures, yet they are useless, and that makes it difficult to know who you can trust, at the same time, there are some good doctors, and there are some scam doctors who prescribe whatever makes them money, and knowing the side effects will make you come back more often.
- How can anyone apply a toxic application and expect natural results ???
 Think about that !!!!!
- When Fred was doing his surgical transplant research, he worked on a Proctor and Gamble grant to improve preservation from 3 days up to 5 days, started in 1980 or 81, with the minerals, he got 10 days, and tweaked it, by 1985, he got it up to 24 days. The head doctor entered it as 5 days, when Fred complained, they said that after that grant, they would then apply for 8, then 10, 12, etc. During this time, Fred was giving some of the recipients who were waiting for the transplant the mineral list with his suggestion to take, then their functions improved to where most did not need the transplant anymore.

- Then, Fred was severely reprimanded and threatened to "Get his act together and do what they tell him to do" and that Fred was hurting their income because of what he was doing. Otherwise, they were going to pull his license when he gets it. Fred quit on the spot.
- There are many situations that support the fact the medical field is about making money, not about "what is right for the patient". A perfect example is my situation with the blood clot in Fred's legs from the accident. He had 3 sets of surgery, and needs a few more procedures to get more clots out, He cannot find a surgeon willing, they say it is too complicated, two said that they actually prefer the easy cases, one said he wanted Fred to die as he referred to Fred as "That holistic crap guy"
- I do the best he can with his pain, meanwhile he is hoping to find a caring surgeon. These doctors do not
 want to help him. They prefer that Fred Lives in excruciating pain when the procedure is right there.
- The doctors are quick to prescribe medications instead of going over the details and taking all the proper tests of all minerals to see what you are low in and take high amounts of whatever you are low in, diabetes is simply due to mineral deficiencies, easy to resolve, we see people with glucose of 500 go to 100 in a month, commonly 3 months. If they are on medications besides the diabetic meds, they will interfere. One gal complained that she did not see much of a change, then we found out she is on 15 different meds, so, we are referring her to an honorable doctor who is capable to work with her to guide her to wean off those medications as her chemistry improves. Then she will see her sugar levels correct themselves. Most people are unaware that their medications cause other problems.

Myth 8: Cancer treatment kills more than it cures

- Because Oliver is from the UK, they may have different approaches than the US. Here in the US, the treatments tend to kill more than they cure, primarily because they approaching it incorrectly. They are viewing cancer as an outside invader, microbe to some, and they are trying to kill it instead of correcting the body's chemistry to correct the biochemistry, as explained above, which will cause the cancer to die off by its own starvation, the resolution would then be correct with no toxic side effects.
- Fred and his sister, Diana, had the same pancreatic cancer. Fred's was in 1976 when he was 21, you already know about the surgery and his evaluation of all the minerals and how he resolved it. September 12,1997, Diana was diagnosed with the same cancer, which Fred was then able to determine the cause of his own cancer, which now made sense when he connected all the facts.
- O His parents were married in 1948, between that and 1950, his mom had 4 miscarriages. When she carried Rosemary, 1950, she stayed in bed for the entire pregnancy. When she carried Diana, 1952, they gave his mom DES to prevent miscarriages, and also when she carried Fred, born June 4, 1955. The DES was outlawed when she carried Barbara, 1957, and Valerie, 1960.
- Diana and Fred were the 2 that his mom was given DES and they were the same 2 that came down with the pancreatic cancer.
- When Diana was diagnosed 9/12/97, Fred gave her the formula information because he did not start manufacturing it yet. She started Sept 12, on October 10, she showed 1/3 reduction and felt much better.
 Then, her doctor reprimanded her, told her to "Stop your brother's mineral crap, you need real medicine"
- She stopped taking the Cellect, she also stopped talking to Fred as though he was her enemy, basically because her doctor convinced her that Fred was "Hurting" her by not letting her have the chemo. She took 5FU and Leucovorin and radiation, started October 15, her health declined rapidly right after those treatments, and died Dec 15, 1997 2 months. Fred was so upset, that was when he told Lora that they have to educate and help as many people as possible to prevent duplication of what happened to Diana.

- Myth 9: We've made no progress in fighting cancer
 - The UK might be having some success with progress, we have no opinion there. However, here in the US, there is no true progress. All they seem to be doing is promoting new toxic drugs, finding ways to make large salaries in their supposed research, while never focusing on properly identifying what it truly is nor how to resolve it correctly without the toxic side effects. Therefore, they are not correcting the root source of the problem. Therefore, they cannot successfully resolve the problem.
 - We have a great track record, with many cases were the people were terminal and are now fine. It is referred to as "Observational Results", as we do not make claims. The cases that are not successful tend to be due to taking toxic applications before they came to us; combining other protocols; as some people incorrectly believe that adding multiple protocols together is better and that one of them has to work. They do not understand that the other chemistries actually interfere with the CELLECT's abilities, then they come back to us with, "It didn't work." They obviously did not listen and did not do it right.
 - Some people take this with their chemo because they were scared into chemo and are too scared to refuse it, which means that they are nice sweet people, but they simply do not understand. This can help reduce the high toxic effects of the chemo to some degree, but, in some people, the toxic chemo is too powerful and they die, some do survive the chemo because this was enough to help them get through it.
 - Some people are guided by others who have no clue how this works, and those friends/relatives misguide them to other protocols either with the CELLECT or they drop the CELLECT and do what their friends say, and they die because of the way they did it. Some people pass away from situations that are totally unrelated. One gal had 4th recurrent brain cancer, showed no evidence after a month, she was doing great until she took up "Kick-Boxing" the injuries created inflammation, the doctors assumed that it was brain cancer, when they did the surgery, it was simply inflammation, no cancer, but the surgery messed her up, they put in metal plates, and such, she had pain, they put her on steroids, then somebody gave her Boswellia (Frankincense) which aggravated her condition, it intensified her pain and she passed as a result. It was such a shame, she was such a wonderful woman with a wonderful husband and daughters, my heart goes out to them, they such a sweet family. Meanwhile, when she passed, there was no cancer, the unnecessary surgery was the cause of the events that led to her death.
 - o The point is: Many people who pass away are incorrectly posted that cancer was the cause of death.

Myth 10: Sharks don't get cancer

- Oliver is correct that Sharks do get cancer, but they do have an interesting chemistry, also, we need to remember that they live in a very healthy environment, and the other sea creatures down there are also healthy, and cancer is a rarity with them too. Therefore, their nutritional environment is more the cause of their good health. And our society is riddled with cancer because of the terrible choices of food and taking the toxic medications.
- The "Shark-related" information has been twisted and has become the subject of misleading information.
 Fred discusses it in his booklet "Primary Discussion" pages 39 43, the link is:
- http://www.fredeichhorn.com/images/0_10_Primary_Discussion_16_1_27_.pdf
- I explain in detail the biochemistry of shark cartilage and how it actually helps to improve metabolism. It does not cure cancer, however, I use it in my formula because it seems to improve the other chemistries, like a catalyst. I tested it years back in the 1980's with the preservation experiments, and saw much longer preservation time, and metabolism rates seemed to show better results.

Myth 1: Cancer is a man-made, modern disease



It might be more prominent in the public consciousness now than in times gone by, but cancer<u>isn't just a 'modern', manmade disease</u> of Western society. Cancer has existed as long as humans have. It was <u>described thousands of years</u> ago by Egyptian and Greek physicians, and researchers have discovered tell-tale signs of cancer in a <u>3,000-year-old skeleton</u>. It's even been discovered <u>in dinosaur bones</u>.

While it's certainly true that global lifestyle-related diseases like cancer <u>are on the rise</u>, **the biggest risk factor for cancer** is <u>age</u>.

The simple fact is that more people are living long enough to develop cancer because of our success in tackling infectious diseases and other historical causes of death such as malnutrition. It's perfectly normal for DNA damage in our cells to build up as we age, and such damage can lead to cancer developing.

We're also now able to diagnose cancers more accurately, thanks to advances in screening, imaging and pathology.

Yes, <u>lifestyle</u>, <u>diet</u> and other things like <u>air pollution</u> collectively have a huge impact on our risk of cancer – <u>smoking</u> for instance is behind a quarter of all cancer deaths in the UK – but that's not the same as saying it's entirely a modern, manmade disease. There are plenty of natural causes of cancer – for example, one in six worldwide cancers is caused by <u>viruses and bacteria</u>.

Myth 2: Superfoods prevent cancer



Blueberries, beetroot, broccoli, garlic, green tea... the list goes on. Despite thousands of websites claiming otherwise, **there's no such thing as a 'superfood'**. It's a marketing term used to sell products and has <u>no scientific basis</u>.

That's not to say you shouldn't think about what you eat. Some foods are clearly healthier than others. The odd blueberry or mug of green tea certainly could be part of a <u>healthy</u>, <u>balanced diet</u>. Stocking up on fruits and veg is a great idea, and eating a range of different veg is helpful too, but the specific vegetables you choose doesn't really matter.

Our bodies are complex and cancer is too, so it's gross oversimplification to say that any one food, on its own, could have a major influence over your chance of developing cancer.

We've also written extensively on the **scientific evidence about anti-oxidants and cancer** in these posts – <u>part one</u>, <u>part two</u> and <u>part three</u>. [Added 28/03/14 KA]

The steady accumulation of evidence over several decades points to a simple, but not very newsworthy fact that the best way to reduce your risk of cancer is by a series of <u>long-term healthy behaviours</u> such as **not smoking**, **keeping active**, **keeping a healthy body weight and cutting back on alcohol**.

Myth 3: 'Acidic' diets cause cancer



Some myths about cancer are surprisingly persistent, despite flying in the face of basic biology. One such idea is that overly 'acidic' diets cause your blood to become 'too acidic', which can increase your risk of cancer. Their proposed answer: increase your intake of healthier 'alkaline' foods like green vegetables and fruits (including, paradoxically, <u>lemons</u>).

This is biological nonsense. True, cancer cells can't live in an overly alkaline environment, **but neither can any of the other cells in your body**.

Blood is usually slightly alkaline. This is tightly regulated by the kidneys within a very narrow and perfectly healthy range. It can't be changed for any meaningful amount of time by what you eat, and any extra acid or alkali is simply peed out in urine.

To maintain the correct balance within the body, your urine can and does change pH, depending on what you've eaten (<u>explained in detail in this post</u>). This can be seen by testing urine pH (acidity) after eating different foods and is the basis of the mistaken belief that diet can "make the body alkaline". But that's all you're changing, and anyone who claims otherwise simply doesn't understand how the body works. [Edited for clarity and extra links, KA 08/08/14]

While eating lots of green veg is certainly healthy, that's not because of any effect on how acid or alkaline your body is.

There is something called <u>acidosis</u>. This is a physiological condition that happens when your kidneys and lungs can't keep your body's pH (a measure of acidity) in balance. It is often the result of serious illness or poisoning. It can be lifethreatening and needs urgent medical attention, but it's not down to overly acidic diets.

We know that the immediate environment around cancer cells (the <u>microenvironment</u>) can become acidic. This is due to differences in the way that tumours create energy and use oxygen compared with healthy tissue. Researchers are working hard to understand how this happens, in order to develop more effective cancer treatments.

But there's no good evidence to prove that diet can manipulate whole body pH, or that it has an impact on cancer.

Myth 4: Cancer has a sweet tooth



Another idea we see a lot is that sugar apparently 'feeds cancer cells', suggesting that it should be completely banished from a patient's diet.

This is an unhelpful oversimplification of a highly complex area that we're only just starting to understand.

'Sugar' is a catch-all term. It refers to a range of molecules including simple sugars found in plants, glucose and fructose. The white stuff in the bowl on your table is called sucrose and is made from glucose and fructose stuck together. All sugars are carbohydrates, commonly known as carbs – molecules made from carbon, hydrogen and oxygen.

Carbs – whether from cake or a carrot – get broken down in our digestive system to release glucose and fructose. These get absorbed into the bloodstream to provide energy for us to live.

All our cells, cancerous or not, use glucose for energy. Because cancer cells are usually growing very fast compared with healthy cells, they have a particularly high demand for this fuel. There's also <u>evidence</u> that they use glucose and produce energy in a different way from healthy cells.

Researchers are working to understand the differences in energy usage in cancers compared with healthy cells, and trying to <u>exploit them to develop better treatments</u> (including the interesting but far from proven drug <u>DCA</u>).

But all this doesn't mean that sugar from cakes, sweets and other sugary foods specifically feeds cancer cells, as opposed to any other type of carbohydrate. Our body <u>doesn't pick and choose which cells get what fuel</u>. It converts pretty much all the carbs we eat to glucose, fructose and other simple sugars, and they get taken up by tissues when they need energy.

While it's very sensible to limit sugary foods as part of an overall healthy diet and to avoid putting on weight, **that's a far cry from saying that sugary foods specifically feed cancer cells**.

Both the 'acidic diet' and 'sugar feeds cancer' myths distort sensible dietary advice – of course, nobody is saying that eating a healthy diet doesn't matter when it comes to cancer. You can read about the <u>scientific evidence on diet and cancer on our website</u>.

But **dietary advice must be based on nutritional and scientific fact**. When it comes to offering diet tips to reduce cancer risk, research shows that the <u>same boring healthy eating advice still holds true</u>. Fruit, vegetables, fibre, white meat and fish are good. Too much fat, salt, sugar, red or processed meat and alcohol are less so.

Also, this post, "What should you eat while you're being treated for cancer", is packed with links to evidence-based advice from our CancerHelp UK website. And this post, from the Junkfood Science blog, explores the science behind sugar and cancer in more detail. [Edited to add more information and links KA 28/03/14]

Myth 5: Cancer is a fungus - and sodium bicarbonate is the cure



This 'theory' comes from the not-very-observant observation that "cancer is always white".

One obvious problem with this idea – apart from the fact that cancer cells are clearly not fungal in origin – is that cancer isn't always white. Some tumours are. But some aren't. Ask any pathologist or cancer surgeon, or have a look on Google Image search (but maybe not after lunch...).

Proponents of this theory say that cancer is caused by infection by the <u>fungus candida</u>, and that tumours are actually the body's attempt at protecting itself from this infection.

But there's no evidence to show that this is true (and plenty of evidence – going back at least as far as 1902 – that it starts from faults our own cells).

Furthermore, plenty of perfectly healthy people can be infected with candida – it's part of the very normal array of microbes that live in (and on) all of us. Usually our immune system keeps candida in check, but infections can get more serious in people with compromised immune systems, such as those who are HIV-positive.

The 'simple solution' is apparently to inject tumours with baking soda (sodium bicarbonate). This isn't even the treatment used to treat proven fungal infections, let alone cancer. On the contrary, there's good evidence that high doses of sodium bicarbonate can lead to serious – even fatal – consequences.

<u>Some studies</u> suggest that sodium bicarbonate can affect cancers transplanted into mice or cells grown in the lab, by neutralising the acidity in the microenvironment immediately around a tumour. And researchers in the US are running a <u>small clinical trial</u> investigating whether sodium bicarbonate capsules can help to reduce cancer pain and to find the maximum dose that can be tolerated, rather than testing whether it has any effect on tumours.

As far as we are aware, there have been no published clinical trials of sodium bicarbonate as a treatment for cancer.

It's also worth pointing out that it's not clear whether it's possible to give doses of sodium bicarbonate that can achieve any kind of meaningful effect on cancer in humans, although it's something that <u>researchers are investigating</u>.

Because the body strongly resists attempts to change its pH, usually by getting rid of bicarbonate through the kidneys, there's a risk that doses large enough to significantly affect the pH around a tumour might cause a serious condition known as alkalosis.

One estimate suggests that a dose of around 12 grams of baking soda per day (based on a 65 kg adult) would only be able to counteract the acid produced by a tumour roughly one cubic millimetre in size. But doses of more than about 30 grams per day are likely to cause severe health problems – you do the maths.

Myth 6: There's a miracle cancer cure...



From <u>cannabis</u> to <u>coffee enemas</u>, the internet is awash with videos and personal anecdotes about 'natural' 'miracle' cures for cancer.

But extraordinary claims require extraordinary evidence – **YouTube videos and Facebook posts are emphatically not scientific evidence** and aren't the same as good-quality, peer-reviewed evidence.

In many cases it's impossible to tell whether patients featured in such anecdotal sources have been 'cured' by any particular alternative treatment or not. We know nothing about their medical diagnosis, stage of disease or outlook, or even if they actually had cancer in the first place. For instance, we don't know what other cancer treatments they had.

And we only hear about the success stories – what about the people who have tried it and have not survived? The dead can't speak, and often people who make bold claims for 'miracle' cures only pick their best cases, without presenting the full picture.

This highlights the importance of publishing data from peer-reviewed, scientifically rigorous lab research and clinical trials. Firstly, because conducting proper clinical studies enables researchers to prove that a prospective cancer treatment is safe and effective. And secondly, because publishing these data allows doctors around the world to judge for themselves and use it for the benefit of their patients.

This is the standard to which all cancer treatments should be held.

That's not to say the natural world isn't a source of potential treatments, from aspirin (willow bark) to penicillin (mould). For example, the cancer drug taxol was first extracted from the bark and needles of the Pacific Yew tree.

But that's a far cry from saying you should chew bark to combat a tumour. It's an effective treatment because the active ingredient has been purified and tested in clinical trials. So we know that it's safe and effective, and what dose to prescribe.

Of course people with cancer want to beat their disease by any means possible. And it's completely understandable to be searching high and low for potential cures. But our advice is to be wary of anything labelled a 'miracle cure', especially if people are trying to sell it to you.

Wikipedia has this excellent list of ineffective cancer treatments that are often touted as miracle cures, which is worth a browse.

If you want to know about the **scientific evidence about cannabis, cannabinoids and cancer**— a topic we're often asked about — <u>please take a look at our extensive blog post on the subject</u>, including information about the clinical trials we're helping to fund.

And if you've seen links to article about scientists in Canada "curing cancer but nobody notices", these refer to an interesting but currently unproven drug called DCA, which we've also written about before. [Added KA 28/03/14]

Myth 7: ... and Big Pharma are suppressing it



Hand in hand with the idea that there is a cornucopia of 'miracle cures' is the idea that governments, the pharmaceutical industry and even charities are colluding to hide the cure for cancer because they make so much money out of existing treatments.

Whatever the particular 'cure' being touted, the logic is usually the same: it's readily available, cheap and can't be patented, so the medical establishment is suppressing it in order to line its own pockets. But, <u>as we've written before</u>, there's no conspiracy – sometimes it just doesn't work.

There's no doubt that the pharmaceutical industry has a number of issues with transparency and clinical trials that it needs to address (the book <u>Bad Pharma</u> by Ben Goldacre is a handy primer). We push regulators and pharmaceutical companies hard to <u>make sure</u> that effective drugs are made available at a fair price to the NHS – although it's important to remember that developing and trialling new drugs costs a lot of money, which companies need to recoup.

Problems with conventional medicine don't automatically prove that alternative 'cures' work. To use a metaphor, just because cars sometimes crash doesn't mean that flying carpets are a viable transport option.

It simply doesn't make sense that pharmaceutical companies would want to suppress a potential cure. Finding a highly effective therapy would guarantee huge worldwide sales.

And the argument that treatments can't be patented doesn't hold up. Pharma companies are not stupid, and they are quick to jump on promising avenues for effective therapies. There are always ways to repackage and patent molecules, which would give them a return on the investment required to develop and test them in clinical trials (a cost that can run into many millions) if the treatment turns out to work.

It's also worth pointing out that charities such as Cancer Research UK and government-funded scientists are free to investigate promising treatments without a profit motive. And it's hard to understand why NHS doctors – who often prescribe generic, off-patent drugs – wouldn't use cheap treatments if they'd been shown to be effective in clinical trials.

For example, we're funding large-scale trials of aspirin – a drug first made in 1897, and now one of the most widely-used off-patent drugs in the world. We're researching whether it can prevent bowel cancer in people at high risk, reduce the side effects of chemotherapy, and even prevent cancer coming back and improve survival.

Finally, it's worth remembering that we are all human – even politicians and Big Pharma executives – and cancer can affect anyone. People in pharmaceutical companies, governments, charities and the wider 'medical establishment' all can and do die of cancer too.

Here at Cancer Research UK we have seen loved ones and colleagues go through cancer. Many of them have survived. Many have not. To suggest that we are – collectively and individually – hiding 'the cure' is not only absurd, it's offensive to the global community of dedicated scientists, to the staff and supporters of cancer research organisations such as Cancer Research UK and, most importantly, to cancer patients and their families.

Myth 8: Cancer treatment kills more than it cures



Let's be clear, cancer treatment – whether chemotherapy, radiotherapy or surgery – is no walk in the park. The side effects can be tough. After all, treatments that are designed to kill cancer cells will inevitably affect healthy cells too.

And sometimes, sadly, treatment doesn't work. We know that it's very difficult to treat late-stage cancer that has spread throughout the body, and while treatment can provide relief from symptoms and prolong life, it's not going to be a cure for very advanced cancers.

Surgery is still the most effective treatment we have for cancer, provided it's diagnosed early enough for an operation to be done. And radiotherapy helps cure more people than cancer drugs. Yet chemotherapy and other cancer drugs have a very important part to play in cancer treatment – in some cases helping to cure the disease, and in others helping to prolong survival.

The claims on the internet that chemotherapy is "only 3 per cent effective" are **highly misleading and outdated**, and are explored in more depth in these <u>two posts</u> from the Science Based Medicine blog.

We also wrote this post in response to concerns that chemotherapy might "encourage cancer".

It important to point out that in an increasing number of cases, the drugs do work. For example, more than 96 per cent of all men are now <u>cured of testicular cancer</u>, compared to fewer than 70 per cent in the 1970s thanks in part to a drug we helped to develop called cisplatin. And three-quarters of children with cancer <u>are now cured</u>, compared with around a quarter in the late 1960s – most of them are alive today directly thanks to chemotherapy.

We know that we still have a long way to go until we have effective, kinder treatments for all types of cancer. And it's important that doctors, patients and their families are realistic and honest about the best options for treatment, especially when cancer is very advanced.

It may be better to opt for treatment aimed at reducing pain and symptoms rather than attempting to cure the disease (palliative care). Balancing quality and quantity of life is always going to be an issue in cancer treatment, and it's one that each patient must decide for themselves.

Myth 9: We've made no progress in fighting cancer



This simply isn't true. Thanks to advances in research, <u>survival from cancer has doubled</u> in the UK over the past 40 years, and <u>death rates have fallen by 10 per cent</u> over the past decade alone. In fact, <u>half of all patients now survive at least ten years</u>.

This article by our chief clinician, Professor Peter Johnson, outlines some of the key facts.

By definition, these figures relate to people treated at least 10 years ago. It's likely that the patients being diagnosed and treated today have an even better chance of survival.

To see how the picture has changed, make yourself a cuppa and settle down to watch this hour-long documentary we helped to make – <u>The Enemy Within: 50 years of fighting cancer</u>. From the early days of chemotherapy in the 50s and 60s to the latest 'smart' drugs and pinpoint-accurate radiotherapy, it highlights how far we've come over the years.

There's still a long way to go. There are some cancers where progress has been much slower – such as lung, brain, pancreatic and oesophageal cancers. And when you lose someone you love to cancer, it can feel as though no progress has been made at all.

That's why we're working so hard to beat cancer sooner, to make sure that nobody loses their life prematurely to the disease.

Myth 10: Sharks don't get cancer



Yes they do.

This excellent article goes into why the myth about the cancer-free shark has been so persistent.

Olly and Kat