

# SODIUM BICARBONATE

VS  
CANCER



MARK SLOAN

# **SODIUM BICARBONATE VS. CANCER**

SECOND EDITION

**EXPLORING THE REMARKABLE  
HEALING POWER OF BAKING SODA**

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This ebook is a chapter from my bestselling book *Cancer: The Metabolic Disease Unravelling*. If you enjoy reading it please pick up a copy of the book for more great information.



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# INTRODUCTION

## INTRODUCTION

SODIUM BICARBONATE, ALSO known as baking soda, is a type of salt that can be found in crystalline rock formations in nature. Bicarbonate, the acid-neutralizing portion of sodium bicarbonate, is naturally produced by the human body and used to buffer excess acidity.<sup>1</sup>

Since one of the metabolic hallmarks of a cancer cell, as first described by Dr. Otto Warburg in 1930,<sup>2</sup> is elevated production of lactic acid,<sup>3-8</sup> which “directly contributes to tumor growth and progression,”<sup>9</sup> it seems reasonable to predict that cancer patients could benefit from additional bicarbonate.

The *fizz* that captured our amazement as children after adding baking soda and vinegar together was sodium bicarbonate rapidly neutralizing the acid and producing carbon dioxide (CO<sub>2</sub>) gas as a result. Similarly, once inside the body, bicarbonate is converted into carbon dioxide;<sup>10</sup> so when we’re talking about sodium bicarbonate, essentially what we’re dealing with is carbon dioxide, which opens the door to some fascinating lines of research.

The relationship between carbon dioxide and life itself is entirely misunderstood by most people in the medical profession and by society as a whole. We’ve been told that carbon dioxide is a toxic environmental pollutant causing dangerous increases in temperature that threaten the

existence of life on earth. However, like many things we're told by politicians and the media, the reality is far different. One of the best ways to learn about carbon dioxide is to examine what happens to various life forms when they are exposed to increased concentrations of it.

## THE NAKED MOLE RAT

Found naturally in the hot, arid regions of eastern Africa, the naked mole rat is a type of rodent that lives strictly underground in large colonies. Remarkably, naked mole rats reproduce for their entire lifespans,<sup>12</sup> they don't feel pain after being burnt with acid,<sup>11</sup> their brains can withstand over 30 minutes without oxygen without damage<sup>137</sup> and in their natural habitats, they are immune to cancer.<sup>13</sup> And while the average lifespan for most rats is less than two years,<sup>14,15</sup> the naked mole rat can live an astounding 30 years,<sup>16,17</sup> making it the longest-lived rodent known.<sup>18</sup>

The exceptional longevity and disease resistance of the naked mole rat have researchers calling it "a true 'supermodel' for aging research and resistance to chronic age-associated diseases."<sup>19</sup> Yet despite decades of research, scientists still haven't been able to determine the reasons behind the mole rat's longevity, even in the most recent studies.<sup>20-22</sup> Perhaps it's because they're searching for a genetic explanation rather than simply examining the naked mole rat's natural environment.

"They live in burrows that are kept closed, so the percentage of oxygen is lower than in the outside air, and the percentage of carbon dioxide ranges from 0.2% to 5%," explains Dr. Raymond Peat.<sup>23</sup> A 2005 study by Israeli scientists investigated the oxygen and carbon dioxide content in burrows of three species of subterranean mole rats and found that maximal CO<sub>2</sub> levels were 6.1% and minimal O<sub>2</sub> levels were 7.2%.<sup>24</sup>

	<b>Carbon dioxide</b>	<b>Oxygen</b>
<b>Air on Earth</b>	0.04%	20.95%
<b>Mole Rat Burrow</b>	6.1%	7.2%

Researchers at the College of Staten Island in New York re-created these environmental conditions in their laboratory and examined its effects on a colony of naked mole rats in 2010. Although they hypothesized the environment would have a negative impact on the activity, memory and social interaction of the rats, what they found was the complete opposite. When the rats were put into an environment of decreased oxygen (hypoxic) and increased carbon dioxide (hypercapnic) they became more social, had significantly improved brain function and their overall movements increased by 76.8%.<sup>25</sup>

## **THE QUEEN BEE**

In honey bee hives, worker bees carefully regulate the concentration of carbon dioxide, which can be as high at 6%.<sup>26</sup> Remarkably, the lifespan of a queen bee is more than 40-times that of a worker bee.<sup>27</sup> So while the queen is in the hive, protected by high concentrations of carbon dioxide, the worker bees are out breathing regular atmospheric air and consuming pollen, which is high in unsaturated fat and produces large amounts of free radicals in the absence of carbon dioxide.

## **THE LONG-LIVED SIBERIAN BAT**

Bats are physiologically the same as mice and as such are destined to live similar lifespans. However, the oldest-surviving bat ever documented is a tiny bat from Siberia that lived more than 41 years in the wild.<sup>28</sup> Researchers measuring the air quality in caves where bats roost have discovered that carbon dioxide concentrations are significantly higher than in the outside air. For example, in Drum Cave, Bungonia, New South Wales, Australia, “the CO<sub>2</sub>

concentration rises to over 6% in summer when a nursery colony, which contains more than 1000 unidentified bats, is present...”<sup>29</sup>

## HUMANS AT HIGH-ALTITUDES

People living at high altitudes have shown a similar resiliency to the long-lived creatures above, including reduced rates of heart disease<sup>30-34</sup> and cancer<sup>35-39</sup> compared to people living at sea level.

What’s the link between living at altitude and carbon dioxide? The decrease in oxygen pressure that occurs at elevation means there is less oxygen pressure pushing carbon dioxide out of cells, allowing the body to retain more carbon dioxide – a phenomenon known as *the Haldane effect*.<sup>40,211</sup>

In 2009, a Swiss study involving 1.64 million people found that the benefits of altitude begin at an elevation of about 900m and that for every 1000m increase in elevation, mortality from heart disease decreases by 22% and mortality from stroke decreases by 12%.<sup>34</sup> San Francisco and Philadelphia researchers reported a 12.7% drop in the incidence of lung cancer for every 1000m increase in elevation.<sup>35</sup>

## THE PLANT KINGDOM

For over 100 years, carbon dioxide has been used to increase the productivity of greenhouse crops.<sup>41</sup> In 1978, scientists from the University of British Columbia, Canada, found that tomato plants grown in greenhouses with enhanced CO<sub>2</sub> concentrations, “flowered earlier and produced more marketable fruit than those grown in normal air.”<sup>42</sup> Peanuts,<sup>43</sup> rice,<sup>44</sup> ginger,<sup>45</sup> and lettuce<sup>46</sup> have also displayed elevated growth performance when cultivated in environments enriched with CO<sub>2</sub>, and these growth-enhancing benefits also extend to grasses,<sup>48</sup> trees,<sup>49-51</sup> tobacco,<sup>52</sup> hemp,<sup>53</sup> roses,<sup>54</sup> algae<sup>55,56</sup> and indeed all plant life on earth. Reviews of plant science literature indicate that boosting



greenhouse carbon dioxide levels by just 300 parts per million (ppm) will increase plant growth by 30%.<sup>47</sup>

Even better, elevated concentrations of carbon dioxide can increase the nutrient value of food for humans,<sup>46,57-59</sup> while decreasing its nutrient value for insects. By significantly lowering the ratio of nitrogen to carbon in plants, nutrient availability for predatory insects is significantly limited. Furthermore, under increased concentrations of CO<sub>2</sub>, the production of natural defensive compounds by plants is increased and the growth and survival of pests are adversely affected.<sup>60,61</sup>

Better still, carbon dioxide enrichment reduces the water requirements of plants by enabling them to use water more efficiently;<sup>62</sup> it makes them better able to survive extreme growing conditions like draught,<sup>63</sup> high temperatures,<sup>64</sup> and excess salinity;<sup>65</sup> it makes them more resistant to bacterial and fungal infections;<sup>66</sup> it suppresses invasive plant species;<sup>48</sup> it increases the number of seeds a plant produces;<sup>67</sup> and it also increases the annual life cycle of plants, extending the growing season.<sup>68</sup>

Once food crops have fully-ripened, packaging them in containers with added carbon dioxide can reduce their decay and significantly prolong shelf-life.<sup>69-71</sup>

The extraordinary disease resistance, longevity and myriad of other benefits imparted to animals, humans and plants inhabiting carbon dioxide-enriched environments have shown us the importance of carbon dioxide. And since organisms that don't require oxygen still need carbon dioxide to survive, we can conclude that carbon dioxide is more fundamental to life than oxygen.<sup>72</sup>

### **A CLOSER LOOK...**

- An experiment from 1980 incubated anaerobic bacteria (bacteria that don't use oxygen) into jars containing a range of carbon dioxide concentrations. The study revealed that contrary to established teaching, "Small supplements of CO<sub>2</sub> (0.25%) allowed good growth of the majority of anaerobes studied."

Furthermore, some anaerobes had a minimum requirement of at least 1% CO<sub>2</sub> for survival and an anaerobe called B. melaninogenicus “needed an atmospheric content of 10--40% CO<sub>2</sub> for optimal growth.”<sup>72</sup>

Many living creatures, from mole rats to bats to bees, even amphibians like frogs, which burrow in the mud to accumulate a surplus of carbon dioxide, inherently understand the essentiality of CO<sub>2</sub> and as such have found ways to intensify their exposures to it. Humans, on the other hand, believe that carbon dioxide is an environmental waste gas and have actually altered their behavior to reduce the amount of it in their environment. (*Who is smarter - man or frog?*)

There’s one more thing that must be addressed in order to eliminate the phobia people have been taught to have surrounding carbon dioxide.

## **IS CO<sub>2</sub> LEADING HUMANITY TOWARDS CLIMATE CATASTROPHE?**

It is the duty of every human being alive to question everything we are told by those who claim authority over us, especially when the solutions they advance involve us giving them \$226 million more in taxes every year,<sup>74</sup> or when we see the media calling us ‘genocidal mass murderers’ simply for doing so.<sup>73</sup>

Anytime the subject of climate change is discussed in the media, we are presented with the extreme view that elevated CO<sub>2</sub> is moving humanity towards catastrophe and that all scientists agree on this “fact.”<sup>209,210</sup> However, when we read the climate science ourselves, we find that not only is there no consensus among scientists, but there is little to no evidence suggesting any reason to be alarmed at all. An extensive review of 539 climate change studies published in peer- reviewed scientific journals between 2004 and 2007 concluded, “Only one paper refers to ‘catastrophic’ climate change, but without offering evidence.”<sup>89</sup>

So while politicians and the media push their unscientific, alarmist perspectives about climate change onto the public in support of their own political and economic interests, scientists, who base their views on empirical evidence, take into account the large and growing body of research showing that carbon dioxide has little or nothing to do with the earth's surface temperature.<sup>75-87</sup> The surge of peer-reviewed studies, analysis and data error discoveries published in recent years have prompted Dr. Ian Wilson and many others to declare that the fear surrounding man-made global warming "bites the dust."<sup>88</sup>

Rather than catastrophe, the rising levels of natural and man-made carbon dioxide in our environment<sup>208</sup> are sparking a revolution of intensified plant growth and abundance that greens the earth and delivers everything needed by humans and all living creatures to thrive with unprecedented levels of health, intelligence, compassion and longevity.

Now that we've solved all of the world's problems, let's find out what sodium bicarbonate can do for a person with cancer and other diseases.



# SODIUM BICARBONATE VS CANCER

## SODIUM BICARBONATE VS CANCER

Many people have claimed that baking soda is a ‘quack’ treatment with no anti-cancer effects - and if this is your opinion, the research on baking soda and cancer may surprise you.

Investigations using sodium bicarbonate to treat cancer cells *in vitro* are limited, yet promising; published in the *World Journal of Pharmacy and Pharmaceutical Sciences* in 2014 by researchers from North Carolina, the study confirmed that sodium bicarbonate can trigger apoptosis in colon cancer cells.<sup>90</sup>

In 2006, Norwegian researchers discovered that an acidic tumor microenvironment promotes metastasis in mice bearing three different types of tumors.<sup>92</sup> Since sodium bicarbonate mixed in drinking water and consumed orally can effectively raise the pH of tumors,<sup>97</sup> researchers from the University of Arizona administered it to tumor-bearing mice to see if cancer metastasis could be prevented. Results confirmed that baking soda “increases tumor pH and inhibits spontaneous metastases” in mice with breast and prostate tumors.<sup>93</sup>

Dr. Robert J. Gillies and his team from the H. Lee Moffitt Cancer Center & Research Institute in Florida examined the relationship between tumor microenvironment pH and the growth and spread of cancer *in vivo*. Results were published in the journal *Cancer Research* in 2013 and found


that oral administration of sodium bicarbonate inhibited the growth and spread of colon and breast tumors. “In every case... the regions of highest tumor invasion corresponded to areas of lowest pH. Tumor invasion did not occur into regions with normal or near-normal extracellular pH,” they wrote.<sup>94</sup> In other words, an acidic tumor environment is essential for cancer metastasis and balancing out the pH using sodium bicarbonate can prevent it from occurring.

One of the mechanisms behind the anti-metastatic effect of sodium bicarbonate was discovered by scientists Ian Robey and Lance Nesbit from the University of Arizona in 2013. Their study found that sodium bicarbonate treatment reduced the number of circulating tumor cells in the blood of tumor-bearing mice to less than half.<sup>95</sup>

Dr. Gillies and his team discovered another mechanism behind sodium bicarbonate’s anti-cancer effects in 2016. It is well established that excess acidity impedes immune system function<sup>166-168</sup> and that neutralization of acidity with sodium bicarbonate can amplify the immune response.<sup>169,171</sup> After administering sodium bicarbonate to tumor-bearing mice, the researchers observed an influx of immune cells into tumors, which prevented the growth of numerous tumor types.<sup>170</sup>

One shocking and incredibly rare fact about sodium bicarbonate is that oncologists actually administer it to cancer patients before, during and after chemotherapy and radiotherapy to protect them from the extreme toxicity.<sup>90</sup> “If you want to see how fast a person can hit the floor during chemotherapy just forget to mix in the bicarbonate and get out your stopwatch!” exclaimed Dr. Mark Sircus. “Those who survive the deadly treatment known as chemotherapy were likely saved by the sodium bicarbonate, and not the deadly chemotherapy poison pumped into their bodies.”<sup>91</sup>

26 terminal cancer patients suffering from severe pain and side effects caused by failed chemotherapy and radiotherapy treatments were administered sodium bicarbonate dissolved in DMSO intravenously by Vietnamese researchers in 2011. Results showed the treatment considerably eased the pain and discomfort of all patients.<sup>96</sup>



# SUCCESS STORIES

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### Vernon Johnson

In 2008, Vernon Johnson was diagnosed with stage 4 prostate cancer that was so advanced it had already metastasized to his bones. Not wanting to subject himself to toxic cancer therapies, Vernon refused all treatments recommended by his doctor and followed the advice of his brother instead. “When Vernon was diagnosed with the disease, I told him to increase the pH in his body because any type of cancer cannot thrive in an alkaline environment,” recalled his brother Larry.

Vernon read that a mixture of baking soda and maple syrup was effective for raising pH, but since he didn’t have any in his kitchen at the time, he substituted it for molasses and began self-treatment.

After consuming the mixture multiple times a day for 11 days, Vernon received a medical examination from his doctor and the results showed his prostate and bone cancers had disappeared completely. Vernon’s success story made headlines in the California newspaper *Valley News* in 2009.<sup>98</sup>

## **Loredana**

Loredana was diagnosed with a breast tumor in 2010. “I took all the tests requested, and it turned out that I needed to get an operation,” she explained. Frightened by the prospect of having to undergo chemotherapy and radiotherapy following surgery, Loredana did some research and found that she had the option to receive sodium bicarbonate therapy following surgery instead. “This got me very interested,” exclaimed Loredana.

She found a surgeon willing to follow the sodium bicarbonate protocol of Italian doctor Tullio Simoncini and had her tumor surgically removed. Once the tumor was cut from her breast, the area was washed with sodium bicarbonate and she continued repeating the washes according to the protocol. One year and multiple checkups, ultrasounds and a mammogram later, she was completely free of cancer.<sup>99</sup>

## **Rod Peterson**

In June of 2008, Canadian Rod Peterson was diagnosed with a tumor in his right kidney. Two months later, Rod had his kidney surgically removed and about 6 months post-surgery, cancer was found in his lungs. Rod’s oncologist explained that he could undergo surgery, chemotherapy or radiation, but none would really work with the type of cancer he had. “Basically, he told me to go home and enjoy the rest of my life. He gave me a card for the psychologist if I needed him and I left the office. I was fairly numb, so to speak.”

Not ready to leave his family behind, Rod started doing some research and found the work of Dr. Tullio Simoncini. After finding his theories convincing, Rod flew to Rome to talk with the doctor in person. Impressed with the meeting and excited to begin, Rod underwent treatment for 6 weeks in August of 2009. “After the treatment I was curious. I came back, I had my CT Scans, and you could clearly see, from past scans where the tumors kept constantly growing, all of a sudden they had shrank, some cases in half. Of course it was very exciting. My

oncologist was ecstatic. He started to say ‘this only happens with 1% of the population. If this continues, we’re going to have to do a write-up on you.’”

Wanting to see his health improve even more, Rod returned for further treatments with Dr. Simoncini in January of 2010. “I went back for treatment with Simoncini. I had a CT Scan to followup with my oncologist, and after two weeks of a second cycle, my tumors *again* had shrunk in half. I continued again with another two weeks of treatment and came back to Canada. In the CT Scan I got when I returned, the tumors were gone; all there was left was scar tissue.” After just three cycles of sodium bicarbonate therapy, doctors confirmed Rod Peterson no longer had cancer. “Because of Dr. Tullio Simoncini I have a second chance at life, and I believe everybody should have that. By meeting Dr. Simoncini, I’m still here today and I am very thankful. I thank God for that.”<sup>100</sup>





# ADDITIONAL HEALTH EFFECTS

## ADDITIONAL HEALTH EFFECTS

### Acidosis:

- Sodium bicarbonate cures metabolic acidosis<sup>101</sup>

### Antibacterial:

- Sodium bicarbonate inhibits bacterial growth<sup>102,104,105</sup>
- Sodium bicarbonate prevents growth of spoilage microbes on vegetables<sup>106</sup>
- Sodium bicarbonate and hydrogen peroxide have synergistic antimicrobial effects<sup>107</sup>

### Antioxidant:

- Sodium bicarbonate “is central to the treatment of many poisonings”<sup>108,114,115</sup>
  - Sodium bicarbonate prevents damage caused by herbicide glyphosate,<sup>109</sup> paraquat,<sup>111</sup> amitriptyline,<sup>159</sup> yew berry poisoning<sup>112</sup> and uranium<sup>136</sup>
  - Sodium bicarbonate (topically) reduces redness caused by jellyfish sting<sup>110</sup>
  - Sodium bicarbonate effectively treats near-fatal flecainide overdose<sup>113</sup>
-

### **Antiviral:**

- Sodium bicarbonate inhibits calcivirus<sup>10</sup>

### **Arthritis:**

- Sodium bicarbonate and calcium gluconate solution effective for treating osteoarthritis<sup>116</sup>

### **Bone Health:**

- Sodium bicarbonate prevents bone demineralization caused by acidosis<sup>117</sup>

### **Brain Health:**

- Sodium bicarbonate corrects mental status abnormalities (i.e. confusion, slurred speech) caused by acidosis<sup>118</sup>

### **Chronic Kidney Disease:**

- Sodium bicarbonate improves nutritional status and dramatically slows progression of CKD<sup>119,120</sup>
- Sodium bicarbonate preserves kidney function in patients with CKD<sup>117</sup>
- Sodium bicarbonate resolves abnormal heart rate in patients with CKD<sup>121</sup>
- Sodium bicarbonate mouth rinse restores function of taste buds and relieves other symptoms of CKD<sup>122</sup>

### **Dental Health:**

- Sodium bicarbonate toothpaste provides a 'clean mouth feel',<sup>123</sup> whitens teeth,<sup>124</sup> enhances plaque removal,<sup>126,127</sup> reduces bleeding<sup>128</sup> and provides "statistically significant improvements in gingival health"<sup>128</sup>
- Sodium bicarbonate mouthwash significantly reduces mineral loss from tooth enamel<sup>125,129-132</sup>
- Sodium bicarbonate chewing gum significantly removes dental plaque and reduces gingivitis<sup>133-135</sup>

### **Detoxification:**

- Sodium bicarbonate eliminates uranium from the body<sup>136</sup>

### **Diabetes:**

- Bicarbonate-rich mineral water increases insulin sensitivity in humans<sup>138</sup>
- Sodium bicarbonate treats diabetic acidosis in children<sup>139</sup>

### **Environmental Remediation:**

- Sodium bicarbonate neutralizes high aluminum concentrations in water<sup>141</sup>
- Sodium bicarbonate removes 92% of uranium from contaminated soil samples<sup>142</sup>
- Sodium bicarbonate removes chemical pollutant polychlorinated biphenyl (PCB) from waterways<sup>140</sup>
- "Mixed with sodium bicarbonate, one metric ton of PCB-tainted soil can be cleansed per hour in a rotary reactor."<sup>143</sup>

### **Exercise:**

- Sodium bicarbonate increases back squat repetitions to failure<sup>144</sup>
- Sodium bicarbonate improves 200m swimming time<sup>145</sup>
- Sodium bicarbonate significantly increases punches landed during 4 rounds of boxing<sup>146</sup>
- Sodium bicarbonate improves cycling performance during repeated sprints<sup>147,148</sup>

### **Farming:**

- Sodium bicarbonate fed to black belly barbados lambs for 10 days significantly improves meat quality<sup>149</sup>
- Sodium bicarbonate corrects acidosis and improves hydration in diarrheal calves<sup>150</sup>
- Sodium bicarbonate improves calcium absorption and eggshell quality of laying hens<sup>153</sup>
- Sodium bicarbonate promotes growth, photosynthesis and biochemical composition of marine algae<sup>151,152</sup>

## **Healing:**

- Sodium bicarbonate prevents excessive inflammation and accelerates healing process<sup>154</sup>
- Bicarbonate-calcium-magnesium water improves skin regeneration<sup>155</sup>

## **Heart Health:**

- Sodium bicarbonate restores abnormal heart rate caused by crack cocaine,<sup>156,157</sup> bupropion<sup>160</sup> and diphenhydramine<sup>161</sup>
- Sodium bicarbonate eliminates seizures and heart abnormalities caused by antidepressant overdose<sup>162,163</sup>
- Carbonated water with a meal reduces risk of cardiovascular disease<sup>164,165</sup>

## **Immune System:**

- Sodium bicarbonate enhances immune system<sup>169</sup>
- Sodium bicarbonate promotes antitumor immunity<sup>170,171</sup>

## **Inflammation:**

- Sodium bicarbonate reduces inflammation<sup>154,174</sup>

## **Lifespan:**

- Sodium bicarbonate significantly increases lifespan of mice<sup>172</sup>

## **Metabolism:**

- Sodium bicarbonate stimulates oxidative metabolism<sup>171</sup>
- Sodium bicarbonate substantially decreases tissue calcification<sup>172</sup>

## **Obesity:**

- Sodium bicarbonate and albumin enhance weight loss effects of anti-obesity herb fenugreek<sup>173</sup>

## **Radiation:**

- Sodium bicarbonate prevents painful ulceration of the mouth caused by radiotherapy<sup>174</sup>

## **Reproduction:**

- Bicarbonate “plays critically important roles during virtually the entire process of reproduction in mammals”<sup>175</sup>
- Sodium bicarbonate effective for simulating embryonic environment during in vitro fertilization<sup>176</sup>
- Sodium bicarbonate improves growth of children<sup>202</sup>

## **Skin:**

- Sodium bicarbonate and acetic acid solution (topically) renews natural immune barrier of skin<sup>177</sup>
- Sodium bicarbonate baths dramatically improve psoriasis in humans<sup>178,179</sup>

## **Sleep:**

- Sodium bicarbonate improves sleep quality<sup>180</sup>

## **Thyroid:**

- Sodium bicarbonate improves thyroid function<sup>181</sup>

## **Tumor Microenvironment:**

- Sodium bicarbonate reduces free radicals<sup>182,183</sup>
- Sodium bicarbonate reduces tumor necrosis factor-alpha<sup>184,185</sup>
- Sodium bicarbonate reduces interleukin-1beta<sup>186,187</sup>
- Sodium bicarbonate reduces interleukin-6<sup>186,188</sup>
- Sodium bicarbonate reduces interleukin-8<sup>187,189</sup>
- Sodium bicarbonate reduces nuclear factor kappa-b<sup>189,190</sup>
- Sodium bicarbonate reduces cortisol<sup>191</sup>
- Sodium bicarbonate reduces prolactin<sup>192,193</sup>
- Sodium bicarbonate reduces nitric oxide<sup>194,195</sup>
- Sodium bicarbonate reduces lactic acid<sup>196,197</sup>
- Sodium bicarbonate reduces prostaglandins<sup>198,199</sup>
- Sodium bicarbonate reduces histamine<sup>200</sup>

## **Other:**

- Sodium bicarbonate softens earwax and aids in its removal<sup>201</sup>
- Sodium bicarbonate dissolves uric acid stones<sup>203,204</sup> and bladder stones<sup>205</sup>
- Sodium bicarbonate effective for treating cystic fibrosis<sup>206</sup>
- Sodium bicarbonate decreases mortality in patients treated for acute respiratory failure<sup>207</sup>
- Sodium bicarbonate increases return of spontaneous circulation during CPR<sup>158</sup>

## **SAFETY**

Considering all the benefits of using sodium bicarbonate therapeutically, and especially when compared to orthodox cancer treatments, side effects are few and exceptionally minor.

Some participants in exercise performance-related studies reported upset stomachs and/or diarrhea at doses of 300mg/kg, which is about 22.5 grams of sodium bicarbonate for a 75kg (165lb) man or woman. Athletes loading up on baking soda for performance enhancement have been able to resolve this issue by consuming sodium bicarbonate in multiple, split-doses.

Vernon Johnson cured himself of metastasized prostate cancer using sodium bicarbonate and the only side effects he experienced were the occasional nausea, diarrhea and weakness. All in all, the treatment consisted of less than half a box of sodium bicarbonate, costing less than \$1, and all of his symptoms went away after the treatment ended - not bad for completely eliminating his cancer.

## **VERNON JOHNSTON'S BAKING SODA & MOLASSES PROTOCOL**

To give people enough confidence to begin self-treatment with baking soda if they choose, it's useful to know the exact protocol

used by Vernon Johnson to cure himself of cancer. Vernon's protocol involved a mixture of baking soda, molasses and water over the course of 11 days. Here's how he did it:

**Days 1-4:** Vernon began by consuming 1 cup of water containing 1 teaspoon of baking soda and 1 teaspoon of black strap molasses. Vernon consumed this mixture once daily for the first four days. After noting that he felt fine and his pH was 7.0 (saliva) and 7.5 (urine), he decided to increase his dose.

**Day 5:** On day five, Vernon doubled his dose and began drinking the same solution twice per day. After reading that cancer cells become dormant at a pH of 7 and dead at a pH of 8.0-8.5, his goal was to achieve a saliva and urine pH between 8.0-8.5 and hold it for four or five days. He used pH test strips to measure his pH and emphasized the importance of taking both saliva and urine pH into consideration, since saliva pH can at times be a poor indicator of blood pH.

**Day 6:** He continued taking two daily doses of his solution and on day six, his pH averaged out to be 7.25. On this day he felt slightly nauseous and his stool had a yellowish tinge.

**Day 7:** Vernon took 3 teaspoons of baking soda in water with 1 teaspoon of molasses for his first dose. For his second dose he went back down to the 2 teaspoons of baking soda with molasses in water.

**Day 8:** Hoping to elevate his pH even more, Vernon took two teaspoons of baking soda in water and molasses three times over the course of day 8.

**Day 9:** He noticed a little diarrhea and felt a bit weak on day 9, but said he "felt oxygen euphoria throughout the day. Like my body was breathing pure oxygen."

**Day 10:** Vernon had a persistent headache at this point and noticed body sweats at night. He took 4 pH readings over the course of the day and they were all in the mid 8's. He then cut back his dose on this day to a 2 teaspoon sodium bicarbonate solution in molasses and water, twice daily.

**Day 11:** On the day before returning to his doctor to assess the condition of his cancerous bones, Vernon experienced diarrhea that was slightly yellow. He reduced his dose to 1.5 teaspoons of the baking soda, molasses and water solution and consumed it twice.

"So there you have it. That was my last day before the scan," said Vernon, before emphasizing the importance of consuming baking soda two hours before or two hours after a meal to maintain the stomach acidity necessary for digestion.<sup>91</sup>



## A WORD FROM THE AUTHOR

Thanks again for reading this ebook.  
If you enjoyed it, please pick up a copy of my bestselling book *Cancer: The Metabolic Disease Unravalled* for more great information.



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