Drunk without Drinking

Suspicion of DUI: *Dying*-Under-the-Influence

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A noted expert shares perspectives from a lifetime of helping people recover
from unsuspected illnesses, to enjoy robust, vital health once again

Simple as 1-2-3…

Suspicion of DUI: Your Life Can Change Forever

"Is there a problem, officer?"
"Your license and registration please."
"Here you are, officer."
"Have you had anything to drink?"
"No, nothing at all."
"Please step out of the car, I need to have you perform some actions."
"Would you be willing to take a breathalyzer test?"

Slipping on a Banana Peel

Whether you should refuse the first offer for alcohol testing is a choice that could have adverse consequences in the courtroom. If the officer has a "reasonable suspicion" that you are driving under the influence, the legal system gives him wide latitude to describe facts that suggest a "probable cause" – and your arrest is likely. Then you are required by state law to take a test at the police station to determine your BAC (blood alcohol level or concentration). With a result at or above the threshold of 0.08%, no demonstration of impairment is required, since merely operating a motor vehicle (even just sitting behind the wheel, not moving) in that situation is illegal (0.05% in Utah), even if you have driven perfectly. If evidence confirming your incapacitation is obtained, you can be charged for the offense. And your life can change forever.

But I'm *not* guilty!

Your behavior "at the scene" might appear contrary to your claim that you have not had anything to drink. Fumbling to find your license and registration – slurring your words – confusion – drowsiness – disheveled appearance – a flushed red appearance in the face – eyes that are glassy, red, or bloodshot – reduced coordination – staggering gait – disorientation – even seizures –

impaired judgement – balance problems – blurred vision – the smell of alcohol on your breath – and so on …. one or more of these might be used to move you toward arrest and prosecution. You might have seen such changes in folks at a party or a sporting event, since alcohol intoxication *for any reason* can produce a wide range of observable features in anyone affected.

Could Auto-Brewery Syndrome *save* you?

Simply stated, Auto-Brewery Syndrome (ABS) is a medical condition where an imbalance of microbes in your gut are producing alcohol (ethanol) that is absorbed into your blood stream and circulates around to affect every organ of your body.[1] Also termed "gut fermentation syndrome" (or "endogenous ethanol fermentation"), most often these "gut microbiome" organisms are yeast (fungi) but some bacteria can be culprits as well. Rare patients have been found to have active alcohol-producers in their urinary bladder[2] or even in their mouth.[3] Since the first case was reported in France in 1894, only about 100 others have been documented in the medical literature.

Sadly, many people are discovered to suffer with ABS only *after* their insistent claims of "not drinking" are further investigated. Prosecutors have a duty to protect the public from undue risk of harm. As such, convincing a prosecutor that a medical diagnosis should be entertained rather than a criminal act can be quite difficult. The facts speak for themselves: if you were apprehended "behind the wheel" and your blood alcohol level was elevated, those are the *only* specifics needed to show that you actually were guilty of "driving under the influence."[4] Prison? Supervised probation? Halfway house? An alcohol-monitoring ankle bracelet? Fines and fees? Loss of your driver's license? Limited driving privileges with an ignition interlock device? Your DUI attorney might be able to negotiate a reduced sentence … but you *are* guilty. Forever. Any other outcome is quite rare – until we can finally educate family members, physicians, law enforcement officers, and the legal justice system on the mitigating circumstances where leniency might be offered in the furtherance of justice, since those suffering with ABS did not *intend* to become impaired and thereby constitute a threat to others.

Your life is crumbling

The randomness of ABS intoxication episodes can result in predictable difficulties, including serious injuries from falls, complications in life, strain on social and marital relationships, absences and loss of employment, and other severe economic effects. A nightmarish panoply of unsuspected health issues can emerge as well – irritable bowel symptoms, a wide range of illnesses, lethargy, confusion, chronic fatigue syndrome, anxiety, depression, and poor productivity perhaps leading to loss of employment. Mothers Against Drunk Driving (MADD.org) note that almost 44% of fatally injured drivers test positive for "drugs" of some kind. Over 13,000 deaths result every year, and families whose lives were tragically altered forever by a drunk driver (for any reason) number in the tens of thousands.

To further confuse your situation, people with ABS can readily develop a tolerance for alcohol, where equal amounts of alcohol lead to lesser effects over time. This means that that they might go through their daily lives and show no signs of intoxication as they gradually can function with

a blood alcohol level of twice "legally drunk" (0.15%, well above 0.08%). Stress, lack of sleep, or worsening physical or mental changes in other organs might cause alarming ABS symptoms at startlingly high levels, such as blood alcohol levels of 0.3 or 0.4%, where many others might be nonfunctional or even dead. You don't "drink very much"? Current research suggests health hazards including cancer and cardiovascular risks occur even at low levels of consumption … or low levels of ABS persistent production of gut alcohol.

Rare as a 4-leaf clover?

Alcohol is a leading cause of morbidity and mortality, with acute and chronic effects contributing to about 5 million emergency department visits and 99,000 deaths in the United States each year. Total number of hospital discharges with any mention of an alcohol-related diagnosis equals approximately 2.6 million each year. The National Institute on Alcohol Abuse and Alcoholism (NIAAA) has reported that 16 million adolescents and adults struggle with "alcohol use disorder" (AUD), the medical diagnosis for an addiction to alcohol. Statistics show that nearly 27% of people have more than four drinks over the course of one event (which NIAAA defines as "binge drinking") at least once per month. They note that 7% of people "drink heavily," meaning that, on average, they drink two or more alcoholic beverages per day – which many would call merely "social drinking."

"Secret sources" of alcohol can be easily overlooked, such as alcoholic gummy bears, Jell-O shots, popsicles, and even fermented foods or drinks like kombucha. NIAAA concludes that the vast *majority* of people who consume alcohol drink it excessively, creating a myriad of chronic illness problems beyond merely excessive calories (weight gain, pre-diabetic syndrome) and liver disease. Interestingly, an internet search combining terms "NIAAA" and "ABS" produced no articles.

Is there a genetic predisposition to alcoholism? Despite the circumstances that suggest such a tendency, confirmatory evidence is slow to emerge. The possibility that someone suffering with ABS might have such a predilection that would lead them to excessive intake of sugars and starches (or frequent use of alcohol) is intriguing, but no research has been undertaken.

ABS patients take little comfort in realizing that the medical community as a whole considers this to be a rare diagnosis. Given the prevalence of alcohol-related diagnoses, very likely those suffering with ABS could be discovered to be *many-fold more* if only physicians maintained a reasonable suspicion and could appropriately diagnose and treat.

Bury your head in the sand?

The "ostrich syndrome" comes from a common myth that ostriches bury their head in the sand in the face of danger to avoid it. This isn't actually true, since an ostrich need not "duck and cover" because they can sprint at 40 miles per hour – and even run at 30 miles per hour for a full 10 miles. The mistake might come from observing ostrich parents dip their heads several times a day into their dirt nest – often 2 to 3 feet deep – to gently turn their developing eggs.

While you might understand that your "average Joe" – whether an attorney, a prosecutor, a judge, a juror – has little or no scientific background to understand ABS, you certainly should expect that a physician does have the needed knowledge and hasn't been burying his head in the sand. Oddly, there are only about 100 ABS cases reported worldwide. Even worse, finding an experienced physician to properly identify and treat ABS is beyond difficult.

While many doctors claim that no persuasive evidence exists, you could share with them that I documented ABS in my ***1986*** Bantam book, **The Yeast Syndrome**, on pages 21 – 28 and 277 – 278.[5] I presented my findings of various gut disorders and ABS at the International College of Integrative Medicine meeting in Atlanta in March of 2016: "Too Drunk to Care About My Heartburn … *and more*." I emphasized the importance of ABS in my 2018 book, **Sick and Tired**, on pages 163 and 180 – 184.[6]

Actually, attorneys who should have an interest in the most modern defense strategies did not appear to have an overwhelming interest in my presentation, with Houston defense attorney Mark Ryan Thiessen, on July 22, 2016, to the 3rd Annual Lone Star DWI Seminar of the Texas Criminal Defense Lawyers Association: "Too Drunk to Care: Driving Under the Influence?" An article detailing our lectures was published in their journal in 2017.[7]

100 years and *we haven't learned much!*

The diagnosis of auto-brewery syndrome is very infrequently made by physicians because this is fundamentally an invisible disease. So the question must be asked: How many people are continuing to suffer, how many lives are slowly disintegrating, how many families will never be the same – because doctors insist on wearing blinders. Discussions at continuing medical education meetings revealed a surprising bias … "I wasn't taught that in medical school," so they are resistant to learning about a different approach, even when I have reassured them (and published widely) about successes achievable. But again – hardly any articles appear in the medical literature.

In an odd twist, ABS is in a similar situation to diabetics in 1922. We knew their blood sugars were elevated and we documented all the tissue damage resulting over time – but we did not have any treatments beyond advising very rigorous dietary restrictions which did help some patients.

Then in 1921 – while lecturing in pharmacology before earning his medical doctorate – study by Frederick Banting for a presentation on diabetes at the University of Toronto led him to devise a simple surgical procedure to isolate in larger volumes this recently identified hormone, insulin. On January 11, 1922, he administered doses to a 14-year-old boy dying with very high blood sugars, and his diabetic changes quickly came under control. Acknowledging the brilliance of his approach, Dr. Banting was awarded the 1923 Nobel Prize in Physiology or Medicine … and hundreds of millions across the planet have had their lives enriched ever since.

1922 – We witnessed their suffering but simply didn't know what to do.

1923 – Hope and help became available as we recognized the source of their diabetic problem and saw readily how to treat it well.

2023 – Could we be "that close" to resolving ABS for the countless victims who are now suffering without any answer?

Onward through the fog

The pink elephant in the room

In the interest of "going along to get along," you might choose to ignore episodes consistent with ABS in your partner, your friend, or … *even yourself!* Between episodes, a whole variety of disruptions to daily life or discomforting symptoms might become more obvious, especially over time. Casual conversations might have brought "reasonable explanations," but more pointed discussions might have been met with aggressive denials or even arguments. Dealing with the pink elephant in the room might be something that family and friends feel is important – but how to proceed without creating harm? The question cuts even deeper if no one nearby is aware of ABS and they instead erroneously focus concern on "secret drinking" or maybe "heavy drinking" or "daily drinking" – and then encounter passionate denials that serve to deflect repeated accusations.

Too few minutes, too little help

Finally you get your loved one to visit your local doctor. This visit might be useless unless **you** actually understand the details of ABS. But at this point, you are subject to the limitations and any biases of your doctor. Who knows … exactly *how much* your doctor knows about ABS? Who knows … whether your doctor believes that ABS actually *could* be a real diagnosis? Who knows … whether your doctor *understands* the questions to ask, the tests to offer, the treatments to propose? Remember that the clock is ticking every minute that you're in the exam room – and your time is just about up.

If your loved one actually suffers with ABS, you must be patient and sensitive because they might have no recollection of any disturbing events. They might have no awareness of circumstances at home or work that you find of concern. Accordingly, your doctor's questions might produce **no** answers from him or her suggesting ABS or alcohol use disorder. In many situations, only the family or friends can provide specific details – but only if they are asked, only if time allows, and only if the doctor has more than a passing knowledge of ABS. That's almost "3 strikes against" ever getting the "right diagnosis," appropriate testing, and effective treatment. Of special concern is that many family members have described that the medical community is surprisingly resistant to considering new knowledge.

Articles such as this one and the website maintained by Dr. Cordell might be your only salvation if you are struggling with a family member or friend who possibly has ABS. The responsibility falls to you to make copies of relevant materials to present to your doctor.[8] Do you have a persuasive motivation to step forward and relentlessly insist, first, on determining whether ABS (or alcohol use disorder) is present and then, on obtaining proper treatment? Consider the harm perpetuated on the broad range of victims: serious and worsening psychological, mental, and physical disorders engulfing your loved one, family turmoil and disruption, emotional scars in

children and others, disintegration of social relationships, impaired work performance, loss of income and all that entails, and most importantly, the prospect of injuries and death inflicted on innocent victims of drunk driving (one of the largest risk factors for traffic collisions).

Curiosity killed the cat, but satisfaction brought it back

Spotting ABS apparently is quite difficult because physicians appear to miss it much more often than not. However, some people are more likely than others to suffer, so becoming aware of possibly "predisposing" situations can help lead you to identify and obtain earlier treatment. You might be the *one* person to save your family or friends from years of misery and worsening. One caution: your doctor might focus on "the obvious," chasing down the rabbit holes of diagnoses with which he or she is familiar – completely missing that ABS is the *primary* concern right now. Given the complexity of illness interrelationships, you must realize that your doctor must treat all identified conditions along with resolving ABS, but first, let's get ABS under control.

Sugars and Starches – First and foremost, most people suffering with ABS sometimes consume more sugars and starches – collectively known as carbohydrates. These might not be obvious as candy and sweets or soft drinks, but a diet laden with "Westernized foods," fruits, whole and processed grains (cereals, baked goods, bread, pasta, others), beans, starchy vegetables, even some canned or frozen fruits and vegetables, and "eating meals out" will suffice. Alcohol is a source of sugar as well, so frequent "social" drinking (or more) should raise your interest. Sadly, the officially recommended "food pyramid" that many people choose to follow is weighted upside-down, encouraging carbohydrates!

Obesity – Obesity is the condition where your weight is more than 20% greater than on the desirable weight chart for your height and sex. About 42% of Americans are obese, about 9% severely so. Highly processed foods – especially "junk foods" – and excessive sugars and starches sponsor changes of several hormones, creating metabolic syndrome (originally termed "Syndrome X" by discoverer and Stanford University professor Gerald Reaven, later called insulin resistance or pre-diabetic syndrome), which results in many chronic conditions leading to suffering and early death.[9]

Syndrome X is characterized by excess belly fat, high blood pressure, high blood sugar, elevated triglycerides, and lower levels of HDL ("good") cholesterol. About 22% of adults between 20 and 79 have at least three of these factors. These changes are associated with higher risks for heart disease and strokes. Weight gain is also a common side effect of quite a few different medications or pharmaceutical drugs, such as antidepressants, antipsychotics, and diabetes drugs.

Adult onset (Type 2) diabetes – Over 37 million adults in the United States, some 11% of the population, are diagnosed as having a glycated hemoglobin (A1c) test over 6.5% (normal is below 5.7%). Some 96 million Americans have pre-diabetes, diagnosed by an A1c of 5.7 – 6.4%, and more than 8 out of 10 do not know they have it. Higher A1c levels indicate higher circulating blood sugar levels, which gradually create serious illness

conditions. Elevated levels of both blood alcohol and blood sugar can enhance injury to the lining of blood vessels (endothelium), creating organ damage classically identified in diabetic patients.[10]

Antibiotics – Ever since the introduction of penicillin in 1945 and streptomycin in 1950, physicians have been quick to over-prescribe many of the dozens of antibiotics for a wide variety of symptoms – often when no bacterial organisms have been identified. Current treatment for recurrent or persistent urinary infections in women can include *daily* low-dose antibiotics. Chronic sinus infections, throat infections, bronchitis, pneumonia, and prostatitis often result in repeated and longer courses of antibiotic treatments – despite my 1986 reporting in **The Yeast Syndrome** on effectively preventing recurrent episodes by prescribing antifungal medication along with an antibiotic and then advising intensive probiotic replacement to restore a more normal gut microbiome.

Doctors at the Mayo Clinic documented in 1999 that yeast is the primary cause of recurrent sinusitis.[11] Based on my own clinical research early in the 1990s, I have successfully treated sinus and lung infections, kidney and bladder infections, and prostatitis (and elevated PSA levels) with aggressive antifungal regimens. Overuse and misuse of antibiotics in animals and humans is contributing to the rising threat of antibiotic resistance. Some types of bacteria that cause serious infections in humans have already developed resistance to most or all of the available treatments. The rising volume of antibiotic use in food production, especially for growth promotion, is also associated with multi-drug resistant pathogens due to the prolonged use of multiple drugs at sub-therapeutic doses. As a society, we are creating impossible challenges for our future.

Frequent infections – Chronic or frequent infections as noted above, or conditions resistant to usual treatment, constitute a significant physical stress on your system, likely predisposing to ABS symptoms. I have successfully treated many such problems with aggressive antifungal regimens as described in my book, **The Yeast Syndrome**. An estimated one-third of people (especially women) likely are plagued by nagging symptoms related to yeast overgrowth. When imbalances of yeast flourish in your gut … well, that's an easy path to suffering with ABS.

Research has shown some surprising observations that might dramatically impact our approach to treating many conditions, including ABS. The documentation of a "plant root fungus" (*Funneliformis mosseae*) in a variety of human tissues (joints, arterial blockage plaque, kidneys, others) by Steve Fry, M.D., and the development of effective treatment programs for chronic illnesses has opened new avenues of investigation, particularly regarding how biofilm-associated organisms might resist the restoration of the gut microbiome.[12] We are increasingly appreciating the critical role of probiotic supplementation to establish long-term results.[13,14]

Gut disorders – Over 37 million medical office visits have a "digestive disease" as a primary diagnosis each year. Starting with your swallowing tube and proceeding all the way down: esophagitis (heartburn), gastritis, "colitis," irritable bowel syndrome (diarrhea alternating with constipation), and abnormal stools, any of these can be associated with

ABS. Short bowel syndrome (usually due to operation), pseudo-obstruction (when nerve or muscle problems slow or stop the movement of food, fluid, air, and waste through the intestines), or small intestinal bacterial overgrowth (SIBO) can be related as well. Many gut disorders have their beginning when prolonged or frequent antibiotics are prescribed for myriad problems. When such drugs reduce the bacterial population in your gut, the stage is set for overgrowth of yeast … including those that can ferment carbohydrates into alcohol.

Fatigue, **brain fog, and other "constitutional" symptoms** – Often these "vague" complaints are poorly diagnosed and treated – again, these can be associated with ABS in many patients. An exhaustive list of such discomforts and distresses is presented in my book, **The Yeast Syndrome.** The difficulty in evaluating such complaints is that they are generalized not localized – when you complain of "elbow pain," your doctor can easily focus diagnostic testing and treatment to that area. In recent years, many people are offering more non-specific complaints that can have a myriad of causes – hormonal and other factors affecting many organs must be evaluated … and stress-related illnesses are high on the list.

Crohn's disease – Any part of your small or large intestine can become inflamed, often in deeper layers, causing symptoms that can vary from mild to severe: abdominal pain, cramping, nausea and vomiting, diarrhea, blood in your stools, fever, fatigue, loss of appetite and weight. Symptoms outside of the intestinal tract can include inflammation of skin, eyes, and joints and, internally, inflammation of the liver and bile ducts. A similar condition is ulcerative colitis, where inflammation and sores form primarily in the lining of the large intestine (colon), creating related belly discomforts.

In conventional medicine texts, they state that there is no known cure for Crohn's disease or ulcerative colitis, but therapies can greatly reduce its signs and symptoms and even bring about long-term remission and healing of inflammation. The medications they endorse are aminosalicylates, corticosteroids, immunomodulators (designed to cripple segments of your immune system), and "biologics" (also targeting functions of your immune system – these are heavily advertised and have scientific names ending in -umab, -imab, -inib, -anib, -cept,-inra). Damaging parts of your immune system to block their ability to react to certain tissues and create inflammation might appear desirable at first glance. However, the "law of unintended consequences" could mean that you are signing your death warrant: serious infection is a main adverse effect but … one final side effect could be death: "Ask your doctor if such-n-so is right for you."

For many years now, I have successfully treated these and many other inflammatory/ immune conditions by aggressively employing protocols described in my 1986 book, **The Yeast Syndrome.** On my website, **www.healthCHOICESnow.com,** a delightful lecture can help you to gain a clear understanding of the fundamental interrelationships between **Immunity and Inflammation and Infection** – these perspectives are secrets to many of my successful treatments.

Liver disease – While only 4.5 million American adults have been diagnosed with liver disease,

more than 100 million have some form of a liver disorder. Left untreated, many can suffer later with liver failure and liver cancer. Progressive deterioration of liver function has profound illness effects that are best treated early. Non-alcoholic liver disease – also called "fatty liver" – is more common in people with certain conditions, such as diabetes and obesity. Alcohol-related liver disease, the most prevalent type of chronic liver disease, is commonly associated with cirrhosis, inflammation and scarring, and causes 250,000 deaths each year in the United States. Elevated blood sugar levels are associated with fatty liver and elevated blood alcohol levels are related to fatty liver and alcoholic hepatitis and cirrhosis. Those suffering with ABS often suffer with both conditions, often undiscovered until they are in advanced stages. More recent research is clarifying the relationship of fungi (the mycobiome in the gut microbiome) in the creation and worsening of liver disease.[15]

Food allergies or sensitivities / non-food allergies – Those suffering with ABS have a higher incidence of both food and non-food immune system reactions. While serious symptoms are rare, these sensitivities often will provoke a variety of discomforts until the patient discovers and chooses to avoid these insults. In a weird twist of fate, many people actually are drawn to foods that provoke reactions, most often mild but potentially serious or even life-threatening. Your immune system is supposed to distinguish between "self" (tolerate, do not trigger an "autoimmune" response), "friend" (whether foods or environmental proteins, do not trigger any reaction), and "foe" (an invader that could challenge survival, definitely respond to eliminate). Someone who appears more "allergic" than others might be harboring ABS patterns inside.

Post-operative infections / changes – Your vigilance should be rising when your loved one seems to have more issues (such as with ABS patterns) after an operation. First, antibiotics are usually prescribed, and these can set the stage for more frequent or more serious episodes, especially as "good bacteria" in your gut microbiome are suppressed and an imbalance of yeast growth is encouraged. Second, unsuspected or persistent infections create significant stress and can provoke ABS symptoms. Third, surgery itself – including anesthesia and especially when prolonged – is a major stressor for your body and recurrent ABS episodes might result.

Immunocompromised – We usually think of people with cancer – and especially with "modern" Treatment programs – as having weakened or altered immune system functions. Alcohol exposure itself impairs immune function. Step back and expand your view: the many "autoimmune" conditions with which we commonly suffer definitely represent impaired activity – often leaving us exposed to a wide variety of other health challenges.[16] More recently, pharmaceutical companies have persuaded physicians to order "biologics," as described above (Crohn's disease). These function by blocking certain aspects of immune function – in other words, you become immune-compromised *on purpose.* You can understand the extent of our fascination with autoimmune diseases by reading an excellent summary on pages 325 – 329 of my book **The Yeast Syndrome**. The more that doctors prescribe these (and ever newer) biologics for these conditions, the more impaired they will be making the immune systems of their patients. Yes, ABS can be more prevalent in people with immunocompromise for any reason.

Incidentally, unsuspected toxic heavy metals and toxic organic chemicals – both increasingly diffusing through our environment – can dramatically damage immune functions. These contribute to the increasing incidence of fungemia – spread of fungus organisms through your bloodstream to your organs – in people who do not have obvious immunocompromise. Happily, both situations are treatable by physicians skilled in their diagnosis and management. Give credence to the emerging literature defining how stress creates and worsens immune compromise.

One point of speculation: in my professional medical opinion, we should remain alert to population-wide exposures – such as with EBV (Epstein-Barr herpesvirus, "infectious mono") – that might *later* create a predisposing immune compromise that could silently affect millions of adults. In an ironic twist, the so-called "vaccines" and so-called "boosters" proposed to address the media-hyperbolic so-called "COVID-crisis" have been repeatedly documented to *reduce* immune system functions after *each* administration … and these appear to be permanent changes.

Stress-associated illnesses – While often overlooked in the evaluation of illness settings and in the planning for comprehensive treatment, research has clearly shown the contribution of "stress" to the development of obesity, diabetes, cardiovascular diseases, impairment of immune responses, and much more. In 1936, Canadian experimental surgeon Hans Selye first proposed the concept of "stress" as the "general adaptation syndrome." He spent a career outlining the impact it has in creating and perpetuating illnesses of our modern world. Struggling to have his ideas understood, he finally concluded that stress is "The rate of wear and tear on the body." My pre-med laboratory director at Stanford University, George F. Solomon, M.D., extended our understanding in his seminal article in 1964, devising a systematic approach to exploring the psychosocial and behavioral factors in health and disease. He spent a career discovering the interrelationships of the mind in immune function, a field now known as mind-body medicine.[17]

Experts estimate that perhaps 90% of physician office visits are for stress-related illnesses manifesting as physical, mental, and psychological symptoms – each of which stimulates surges of adrenaline and cortisol hormones. Chronic pulsing of these hormones creates any number of chemical and functional imbalances, many of which are expressed in ABS patients. Appropriately addressing these concerns can markedly accelerate recovery, prevent disease, promote healing, and enhance overall well-being for years to come. Prayer and meditation are tools that can measurably help reduce the effects of stress and improve coping strategies.[18,19]

Dental and gum diseases – While bad breath (halitosis), cavities, and gum diseases (inflammatory gingivitis, periodontitis) would appear to be solely localized issues in your mouth, that is simply not the case. In fact, dental problems most often involve persisting infections and these can be health-threatening. Similar to the gut, your mouth has its own specific "oral microbiome," a dynamic system shaped throughout life by factors including your genetics, transmission from your mother, dietary habits, oral hygiene, medications, systemic factors, and environmental influences.[20] Recent studies show that

your oral microbiome influences your dietary preferences – that can be very significant for those prone to ABS.

Unexpectedly, oral cavity-associated microbes have been detected in many distant organ sites, including the small intestines, lungs, heart, brain, and placenta. Research has shown that Alzheimer's dementia and even "regular" dementias are infections in your brain – and oral-cavity organisms have been strongly implicated, at least in my continuing literature review. Associations have been documented between periodontal disease and chronic conditions such as cardiovascular disease, high blood pressure, and inflammatory bowel diseases. Further, oral cavity-associated organisms have been shown to influence immune responses and disease progression in *other* organ sites. The effects can be overwhelming, beyond caries (cavities) and periodontal (gum) disease but also resulting in cancers in the mouth, esophagus, pancreas, colon and rectum. Ethanol has been documented as an end product as well, contributing to ABS patterns. Incidentally, periodontal disease almost *never* requires gum surgery when properly treated.

Nutritional deficiencies / imbalances – Excessive alcohol consumption causes a number of nutritional deficiencies affecting cellular metabolism throughout your body. However, the various diseases described above also can profoundly disturb your nutritional sufficiency. In an ever-worsening downward spiral, deficiencies can impair tissue functions, which can create further deficiencies and thence generate other disease conditions, leading to more striking deficiencies and so on.[21] While physicians might focus on one or two key concerns, their failure to understand, assess, and simultaneously replace all critical nutritional deficits will limit your recovery with immune system functions and all other organ systems as well. In this situation, you might have difficulty in resolving your ABS patterns. Over the past 30 years, advances in nutritional physiology have given us remarkable non-drug tools to help improve a growing number of conditions, including every single one of those in this list. A comprehensive integrative medicine/nutritional support approach can make recovery with ABS both faster and more permanent.

Parasites – Poorly studied in Western medicine and often ignored as substantial risk factors for persisting illness, parasites are organisms that live off of other organisms. A number of types can be present at the same time, especially if immune defenses have been compromised. Testing for their presence can be frustrating, since "negative" results do not necessarily mean that none are present.[22] Further, medications (and herbal products) used to treat them are unusual and few physicians are experienced in managing such treatment programs.

While many people think that you acquire parasites primarily from foreign travels, that is a misconception. In restaurant restrooms, you have seen the signs instructing "Employees must wash hands before returning to work." Many of these folks have come from other countries and have brought their local parasites with them, to share with us. Since both parasites and auto-brewery syndrome are such rare conditions, no published research has demonstrated a connection. In my professional medical opinion, an

association likely exists and should be considered in patients who are slow to recover or who continue to suffer recurrences despite what should be adequate ABS treatment.

Psychosocial parameters – Rarely discussed but perhaps critical for recovery and maintenance of better health, free of ABS patterns, is the establishment of new personal relationships and daily habits. Simply stated, as with recovery from alcoholism or drug addiction, improvement with ABS can be accelerated by **avoiding** certain places, social situations, and even people that used to be a big part of one's life. When past social patterns included "stopping at a bar for a quick drink on the way home" or "just a couple of cocktails before supper" or any *other* behaviors that might lead to dietary indiscretions (not just alcohol but especially carbohydrate intake), then these or similar patterns must be abruptly and completely interrupted. These actions give credence to the contribution that mental health makes in the recovery process – even though someone with ABS might not have many or most of the characteristics of an "alcoholic" who might be encouraged to "seek help."[23] When your business obligations require you to host or attend meetings or events where alcohol is served, you must be especially vigilant to resist easy temptations.

While some people have found that attending Alcoholics Anonymous meetings is useful in providing support, in my professional medical opinion much more benefit might be found by having someone suffering with ABS to attend – *along with* a family member – meetings of Al-Anon (al-anon.org). Those who are hesitant or who gain no benefit from such a program could find comfort and guidance from their local pastor or a counselor with whom they can relate, to assist with mental or emotional support during the early recovery process. Someone with professional experience to help with the "bumps in the road" that will surely come could lend a helping hand when it is needed most. One key observation: social isolation poses much greater risks for someone suffering with ABS, so *family* living can be important to help them through life stresses.[24]

Look – the end of the rainbow!

We have reviewed above a variety of factors related to many of those suffering with ABS. First and foremost, you should always remember that ***this is a treatable*** condition.

In contrast to other "illnesses," ABS is ***not*** a one-way street where "something is wrong with the patient." The problem starts with an imbalance in the gut – and correcting that is where it ends!

The take-home lesson for virtually everyone who is suffering: Frustrating and common symptoms in any number of systems, including gastrointestinal conditions, often can be resolved easily, safely, and completely by evidence-based clinical diagnosis and treatment leading to reduction of abnormal *over*growth of enterocolic fermenting yeast or bacterial organisms, restoration of a more normal gut microbiome, and replacement of nutrient depletions that have arisen over time. **Your future can be very bright – and normal again!**

After reviewing the various "predisposing" and "resulting" medical conditions, you can understand that finally resolving the ABS pattern might require some sophisticated medical

training and expertise – but **definitive care can produce the desired results virtually every time**.

The patient and his or her family and friends must understand that gaining and maintaining a future free of ABS patterns will require adhering to critical lifestyle changes. And that is where difficulties can arise. A supportive family makes the transition to better health much easier, since long-term dietary management often is critical. Adhering to health habits that reduce the likelihood of frequent antibiotics and so on lessens the common challenges to a healthy gut microbiome. Remember – restoring and maintaining a robust population of desirable gut microbes, though frustratingly difficult in some patients, is ***the key*** to treating the auto-brewery syndrome.

You can learn much more about treatment strategies very easily. I was invited to share my latest discoveries and perspectives on the appropriate evaluation and treatment of The Yeast Syndrome in the June and July 2022 issues of the **Townsend Letter**, an integrative medicine journal.[25] This review is easy to read and understand and gives a broad look at the many issues involved … so download it and share it widely with your friends.

Over-think and over-test!

Physicians who are not familiar with auto-brewery syndrome are often hesitant to move forward quickly. Many times they will want to order a number of tests, making sure that other illness issues are not the "actual cause" of symptoms, making sure that their treatment protocol appears to be "the right thing to do," and so on.

Given my years of experience with ABS and The Yeast Syndrome, I am much more direct in evaluating your history, your earlier laboratory results, and perspectives from family members. While I might order a number of tests as "baseline" values, only rarely will I delay starting your treatment until these newer tests are reported.

Reports on the internet and published articles can describe a painstaking search for the predominance of specific organisms (especially yeast, sometimes particular bacteria) in your stool samples. Some physicians insist on "looking inside," with various x-rays or even inserting a "scope" for direct visualization and obtaining samples of fluids: esophagogastroscopy and colonoscopy. Unless you suffer with specific gut complaints that warrant these more invasive examinations, in my experience this is a fruitless undertaking that serves to postpone your eventual diagnosis and treatment. Some doctors will insist on glucose tolerance testing and blood alcohol levels after a "sugar challenge," sometimes insisting on a brief hospital stay "for monitoring." While these tests will generate numbers to review, they contribute little to your ultimate recovery. I am especially distressed when their contrived tests fail to show expected elevations of blood alcohol levels or cultures (or microscopic evidence) of suspicious organisms, so the physicians then dispute the diagnosis and press on to search for explanations other than ABS.

ABS is caused by an imbalanced overgrowth of one or more microbes living in your gut – some are yeast/fungi, others are bacteria,[26] so you might require antibacterial antibiotics as well as antifungal drugs (usually two, maybe even more), sometimes for many months. While we like to think that laboratory science can provide precise answers, our technology is deficient in many ways. From the very beginning of my treating such issues 40 years ago, clinical evaluation with careful observation of treatment results has been my fundamental approach to restoring your better health. Remember: *one size fits none* – every patient requires their own personalized program to progress through to final recovery.

Honestly, appropriate dietary counseling, precise nutritional supplements directed at ABS and other coexisting health issues, antifungal (often with antibiotic) medications, and probiotic formulas to restore a more normal gut microbiome – ***these*** are the keys to resolving ***any*** ABS pattern. Rather than reviewing treatment protocols that might not apply to you, this article is merely an introduction to what has been my successful approach for many years. What you should expect in the future is a great deal of customized counseling, addressing the various factors in your lifestyle and social situation that need to be modified in order to assure your initial and continued progress.

Give particular attention to the Phase I Celebration of Healthy Eating for The Yeast Syndrome as explained in my book: Meats, Eggs, Vegetables, and Yogurt. Ignore any warnings you might have heard about meats or eggs or butter raising your blood cholesterol level, that simply *doesn't* happen.[27] Be very reluctant to follow other dietary menus embraced by diverse writers or internet "experts" who lack my clinical experience, authoritative expertise, and nutritional science competence. Essentially you are eliminating sugars and starches and, of course, any alcohol – ***that*** is the key to allow you then to proceed to eliminate ABS and restore the internal balance to create robust, vital health.

Since everyone is different, every assessment and treatment program must be personalized. For general ideas of my approach to create the path for your recuperation, refer to my 1986 book **The Yeast Syndrome**. More recent details are offered in my 2022 extensive review article, ***Still* Missing Diagnosis of the Yeast Syndrome**?, available as a free download on my website, www.healthCHOICESnow.com, and in my 2018 book, **Sick and Tired?,** also available as a free download. Armed with "the big picture" of my methods, you will more easily understand the specific recommendations advised for *your* recovery.

Suspicion of DUI: *Dying*-Under-the-Influence

This short review has introduced you to many illness factors related to auto-brewery syndrome, whether contributing to its onset and episodes or resulting from organ changes that these disorders bring about over time. You have seen that several of these are serious medical conditions, ones that can lead to a great deal of suffering and even an early death.

My suggestion of "***Dying***-Under-the-Influence" aims directly at the years of suffering where doctors fail to make the correct diagnosis, where they fail to offer corrective treatment, and while your organs are steadily worsening. You are, literally, dying a bit more each day until your

offending but unsuspected gut imbalance is corrected. Facing that reality, "***driving***" under the influence appears not quite so menacing as fixing the items that are killing you slowly.

Save-A-Life Quiz

Where to start? Well, at the beginning! If you have a family member or friend who might be suffering with auto-brewery syndrome, assisting them to get lifesaving help early could give them *dozens* more years of robust, vital, rewarding life.

Here are some factors to consider – where further discussion might be had, simply ask questions about how they are *feeling* with this, what *worries* might they have for the future, what *limitations* are they encountering, what else would they like to *share* about this.

Non-accusatory questions are essential, otherwise these conversations can readily degenerate into sparring contests that completely shut down any exchange of useful information. Remember, the purpose of raising your concerns is to create a safe space, a setting that can allow your loved one to find support and encouragement, to share their frustrations and their fears, and to comfortably seek assistance with medical diagnoses that could be threatening their very survival.

- Do you smell alcohol when someone has not been drinking?
- Do you see your family member struggling with any activities that should be easy and have been effortless in the past?
- Does your family member appear confused or challenged?
- Has your family member's diet changed, especially with more selections of sugars and starches?
- Does your family member seem to struggle more after eating more sugars or starches – or even some alcohol?
- Are blood sugar measurements often higher than before?
- Has your family member's daily routine changed without obvious need or explanation?
- Is your family member suffering more with daily discomforts, without obvious explanation?
- Is your family member more argumentative – or strangely silent or perhaps even evasive?
- Do you have concerns that you can't quite identify but

which disturb you now more than before?

- Is your family member encountering more challenges at work?
- Is your family member having mood changes or episodes disrupting their life – at home? at work? otherwise?
- Is your family member suffering with bruises or injuries or stumbling or falls?
- Is your family member encountering memory or concentration lapses? – or losing interest in usual hobbies or amusements?
- Has your family member withdrawn from activities or friends that were enjoyable before?
- Is your family member having new or worsening issues with known medical problems? (refer to the above list)

You can see that these and similar other questions are based on *your observations*, on your "intuition" regarding *changes in daily life* that attract your attention. Certainly nothing might be there, but your kind and gentle caring can help identify concerns that might be arising long before serious issues emerge.

One final note: If a visit to an emergency room is necessary for any reason and if a blood alcohol level is elevated, medical personnel will make the obvious assumption that your family member is a "closet alcoholic." ***You*** must raise the prospect of auto-brewery syndrome, about which they likely will know nothing – this provides a golden opportunity to arrange for an appropriate medical evaluation of the factors presented in this review. Stay committed and insistent on getting real answers, and do not settle for casual dismissal by people who simply do not know what you now know. You could, indeed, save a life … one that you treasure and with whom you hope to share a future.

Another last piece of advice: Beyond issues such as Suspicion of DUI, people with ABS can encounter other problems with the law. Given that their medical diagnosis can create entanglements where others can be prejudiced against them, be sure that you find a skilled attorney experienced in presenting an effective defense.

A similar caution can be offered with regard to obtaining medical evaluation and treatment: Find a physician experienced in efficiently managing auto-brewery syndrome, so that your family member gets the very best care. This is hardly the time for your situation to be a "learning opportunity" for your local doctor. Red Adair was the world-famous oil field firefighter … he cautioned people wisely: "If you think it's expensive to hire a professional to do the job, wait until you hire an amateur." Doing it right is critical for your future!

John Parks Trowbridge, M. D., recognized for a career of innovative integrative solutions, has been named a Marquis Who's Who® Top Doctor in Advanced Medicine and a recipient of the Alfred Nelson Marquis® Lifetime Achievement Award. An Eagle Scout and then a National Merit Scholar educated at Stanford, Case Western Reserve, Mount Zion Hospital (now a U. C. San Francisco campus), the Texas Medical Center, and the Florida Institute of Technology (master's studies in nutritional medicine), his exceptional experiences in medicine, surgery, and nutritional technologies encouraged him to ask provocative questions. His persistent curiosity in resolving perplexing issues over 45 years has enabled him to find effective answers.

Serving for years as a senior aviation medical examiner for the FAA, a "company doc" for over 4 dozen companies in heavy industry, and medical director for a mold remediation company provided invaluable expertise in toxicology and environmental science. A Fellow of the American College of Advancement in Medicine, he is recipient of the Distinguished Lifetime Achievement Award of the International College for Integrative Medicine. He has served as president, officer, or director of several integrative medical, dental, and lay organizations, including the National Health Federation, has lectured around the world, has produced five dozen hours of CDs and DVDs, and has authored many articles and several bestselling books, all sharing his unique perspectives.

Are you needing guidance to recover with ABS? Dr. Trowbridge is available for teleconsulting and comprehensive management of well-motivated, compliant patients who have strong family support. He and his devoted staff at Life Celebrating Health near Houston, Texas, welcome those struggling with challenging diagnoses who insist on enjoying a healthier future.

1-800-FIX-PAIN – www.healthCHOICESnow.com.

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[26] In case you encounter a doctor who is not convinced that ABS is caused by imbalanced growth of fermenting gut microbes, here is a list of organisms documented in the past to be involved: *Saccharomyces cerevisiae*, *Saccharomyces boulardii*, *Candida glabrata*, *Candida albicans*, *Candida kefyr*, *Candida parapsilosis*, *Klebsiella pneumonia*, *Enterococcus faecium*, *Enterococcus faecalis*, *Citrobacter freundii*. Future evaluations of patients very likely will identify others as well.

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