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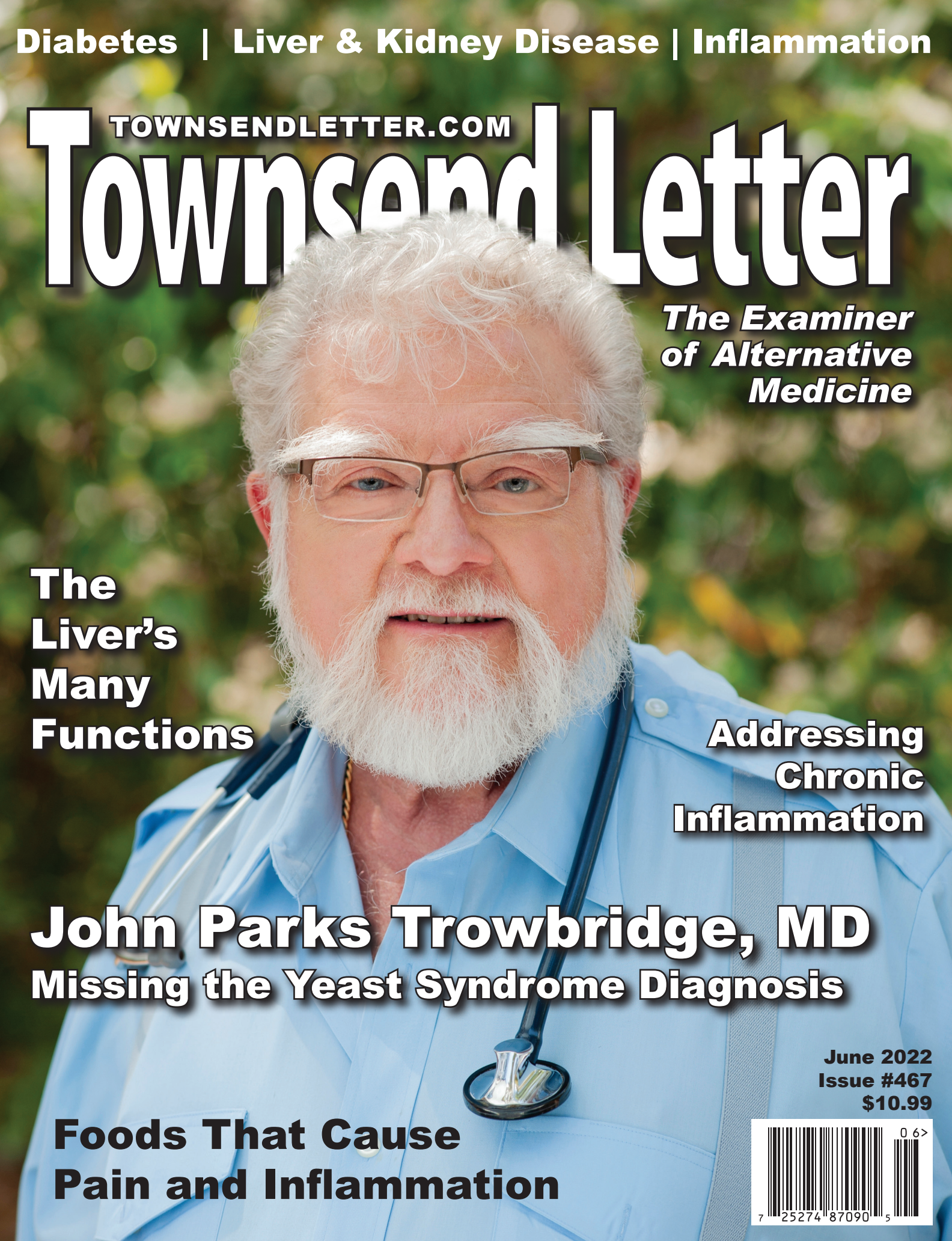

The Liver's Many Functions

Addressing Chronic Inflammation

John Parks Trowbridge, MD
Missing the Yeast Syndrome Diagnosis

Foods That Cause Pain and Inflammation

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FINALLY … *YOUR* PATH TO BETTER HEALTH!

Townsend Letter has been the leading journal for practitioners to share advances in patient care for 40 years. As a result of these thousands of articles, millions of people have enjoyed their lives and shared more years with their families, celebrating robust health they did not expect they could ever regain.

Few of the leading experts in this "integrative approach" have been featured on the cover and in the pages of Townsend Letter – an honor joyfully bestowed on the leading specialist in the diagnosis and treatment of The Yeast Syndrome, John Parks Trowbridge M. D., FACAM.

At the invitation of publisher Jonathan Collin, M. D., this set of articles – published in the June and July 2022 issues – is written to make these complex issues understandable to countless suffering patients … and to help direct their physicians appreciate the many aspects of care required to achieve early results and lasting resolution. Despite many years of lectures and articles since the (still bestselling) 1986 publication of Bantam's **The Yeast Syndrome**, few practitioners understand the steps required to set the foundation for controlling yeast overgrowth. Further, many fail to realize the length of time needed to promote healing of the many damaged organ systems that create and worsen various "degenerative diseases" that silently steal years of enjoyable health.

Thanks to the generous permission of Dr. Collin, visitors to my website – www.healthCHOICESnow.com – and that of my dear friend Doug Kaufmann – www.KnowTheCause.com – are able to read for the first time my original protocols developed over the past 40 years. My intention is that hopeful patients will receive appropriate successful treatment rather than *mistakenly* being told "Well, treatment for yeast didn't work, so we'll have to try other approaches" – often for months or years, never quite achieving the health they deserve … and spending a fortune.

Doug Kaufmann taught me about food allergies in 1981. In 1985, I shared with him what I was learning about The Yeast Syndrome. He then worked with various doctors in Dallas and gained excellent perspectives that he has since shared with millions of people around the world through his syndicated television program, **Know the Cause**, his several books, and his newsletter. Check your listings to watch his show daily – and subscribe to his newsletter: https://knowthecause.com/newsletter-signup/.

My easy-to-read 2017 book – ***Sick and Tired?*** – is available for ***free*** download from my website, https://healthchoicesnow.com/wp-content/uploads/2022/02/Sick-and-Tired_.pdf. Dozens of free CD audio programs share successes enjoyed by our patients: https://healthchoicesnow.com/radio-shows. Several free DVD videos are available as well: https://healthchoicesnow.com/videos. Those who want to see where the future of medical practice is going would enjoy my provocative video presentation of often ignored interconnections of *Immunity, Inflammation, and Infection*: https://healthchoicesnow.com/videos/#video-8. Feel free to browse the many informative programs and brochures on our site, drawing on broad expertise in many fields, endorsed in over 50 years of medical study and practice.

Do you still have questions regarding how we might help you? Send us a note through our website: https://healthchoicesnow.com/contact-us. Do you want in-person care for your frustrating illness issues? Call to review your concerns with one of our Treatment Counselors: **DIAL 1-800-FIX-PAIN** [1-800-349-7246]. If travel poses challenges, ask them whether "teleconsultation" visits might be appropriate for your care.

Townsend Letter has invited other major articles by Dr. Trowbridge, including **Cardiovascular Chelation: Personal Pollution and Matters of the Heart** (May 2010); **Chelation Therapy: Stepping Into the Next 60 Years, A Historical Commentary** (April 2013); **Managing Cardiovascular Diseases: Ramblings of a Maniacal Frenetic – Pragmatic Reflections on Helping Patients Understand Their Illnesses and Treatments** (May 2015); and **Head-On Collision Kills Millions Yearly** (May 2016), Subscribe to receive monthly updates of major advances in integrative medicine: https://www.townsendletter.com/e-newsletter-subscription-upgrade/ – also available is their *free* Townsend e-letter – 360-385-6021.

Still Missing Diagnosis of The Yeast Syndrome? – Part 1

By John Parks Trowbridge, MD, FACAM

"There are known knowns. There are things we know we know. We also know there are known unknowns. That is to say, we know there are some things we do not know. But there are also unknown unknowns, the ones we don't know we don't know."
~ *Secretary of Defense Donald Rumsfeld*

I Haven't a Clue

I didn't know about yeast, so I didn't think of it.

I had heard about yeast, but I forgot to consider it.

I knew about yeast, but I didn't think it could be causing these problems.

I didn't know any tests could show yeast problems, so I didn't order them.

I had heard that yeast maybe could cause illness problems, but I didn't accept that explanation.

I know that women had yeast problems – but I couldn't see that recurrent infections for them or for men could be related.

I know that treating a persistent rash is easy, but I never thought that yeast overgrowth could explain why it keeps coming back.

I've been treating infections all my life – just learning how to use newer antibiotics is probably what my patients need.

I've heard that antibiotics upset gut bacteria, but I can't see how that could lead to any recurrent health issues, so I'll just keep treating persisting problems the best ways I know … or refer to specialists as needed.

When the Yeast Syndrome Is *Not* Treated As Needed

Let's get one thing perfectly clear: "yeast" is ***NOT*** the problem.

Yes, a startlingly wide panoply of discomforts and illnesses relate to toxins produced by yeasts – but yeast is ***NOT*** the problem.

So … what is the real answer?

Our patients, quite simply, are sick. Their immune systems are failing, their physiology is twisting all wrong, their nutritional status is compromised, their food selections are abysmal, stresses in their lives are overwhelming – and our "doctoring" *often* worsens their conditions and addresses none of these root causes.

Root causes? Yes. The Yeast Syndrome is nothing more than the result of *our* inadequacies, our failures to advise our patients on how to correct their underlying challenges.

In other words, they *are* sick … and *stay* sick … and get worse over time for one simple reason – it's ***our*** fault!

"I don't do anything wrong!"

Actually, you probably don't do anything right.

But you hold yourself out as a "health professional" – allopathic physician, osteopathic physician, naturopathic physician, chiropractic physician, physician assistant, nurse practitioner, nutritionist, health coach. That means that patients innocently believe that you know what you're talking about, that you know how to assess their problems, that you know how to propose and manage treatments to help them regain and maintain better health.

But you don't. Because you simply don't know what to do. Because you lack the training, the experience, and the perspectives to "see" what's really happening with regard to yeast.

Remember – it's not the yeast. It's the deficiencies in the patient.

For those of you who treasure medical history – this misunderstanding is the classical and predictable result of relying on the discredited views of Pasteur rather than recognizing the more realistic ones of Béchamp and Bernard. Pasteur – a chemist – insisted that his "germ theory" easily explained that a microbe was responsible for every disease. In contradistinction, Béchamp, a physician and pharmacist, and Bernard, a medical physiologist, both endorsed the body's natural healing mechanisms, maintaining that microorganisms only become pathogenic after environmental factors cause the host's cellular "terrain" to deteriorate.

History records that Pasteur recanted his conclusions on his death bed, admitting that Bernard was correct, the "terrain" was the best explanation for development of disease. Did Nature consider that his opinion actually mattered? Not at all. Galileo spent the last nine years of his life in house arrest, having been adjudged by the Roman Catholic Church of promoting heresy, namely the proposal by the Polish astronomer Copernicus, that the earth orbited around the sun. Did Nature consider that the judgment of the church mattered? The only thing that ever matters is the Law of Nature because that's how the real world works.

So, the question must be asked – can you do *anything* right?

I don't mean to sound antagonistic. But honestly I'm not here to win friends. I'm here to influence people. Practitioners. So that dozens of millions of patients can – finally – be treated, correctly and well, with their health being restored and preserved for years to come.

Are you now *ready* to learn how to do "what's right"?

The real question, of course, is whether you're ready to admit the prospect that preconceived ideas limit your ability to see what is causing illness in many of your patients…to abandon those that fail to deliver the best results…and then to learn more fundamental principles of disease and health that will enable you to treat your patients well. Finally. For real.

Let's Start from the Beginning

Descriptions of what sounds like "thrush" (oral yeast colonization) hearken back to the time of Hippocrates *circa* 460–370 BCE. Vulvovaginal candidiasis was first described in 1849 by Wilkinson; and in 1875, Haussmann demonstrated the causative organism in both vulvovaginal and oral candidiasis is the same. For dozens of years, these persistent, often recurrent, infections were considered and treated in isolation, unrelated to other clinical circumstances. In almost all instances, *Candida albicans* is the invading organism.

Medical advances come from keen observations and a willingness to learn their explanations. With regard to The Yeast Syndrome, the story is profound in its simplicity. During his training, Alabama internist C. Orian Truss, MD, in 1953 evaluated a coal miner with a cut finger whose organ functions were rapidly deteriorating despite antibiotics and steroids. "When were you last well?" was his question: "Before I cut my finger." *C. albicans* growing in sputum cultures had been dismissed by his physicians as opportunistic – but Truss chose to treat him with Lugol's iodine solution. The antifungal effect was startling … and the patient fully recovered.

Dr. Truss was called to the psychiatry service to treat a young woman with yeast infections of the vagina and intestine, seemingly associated with allergic asthma and hives. Reviewing her chart, he realized the coincident onset of mental confusion and suicidal depression. But then came the surprise…the rapid disappearance of mental and virtually all *other* symptoms when he aggressively treated her yeast infections. His reluctant conclusion: the apparent capacity of this fungus to cause serious systematic illness.

Not yet fully obligated to his observations, Truss was confronted with more patients suggesting that yeast could be a significant pathogen. After completing studies in female endocrine pharmacology, he found that many women seemed to suffer from a constellation of symptoms that baffled their doctors – leading, as expected, to their diagnosis as hysterical or hypochondriacal. A pattern emerged: many had a long history of repeated vaginal yeast infections. Could the variety and persistence of their symptoms represent an undiagnosed sub-

clinical infection with *C. albicans*? Truss prescribed nystatin (isolated in 1955 from bacteria found in a barnyard in ***N***ew ***Y***ork ***stat***e) rather than the usual gentian violet used for comfort with yeast overgrowth. Many patients experienced dramatic recovery.

In 1978, Truss authored a landmark article entitled "Tissue injury induced by Candida albicans: Mental and neurologic manifestations."[1] Several other papers followed, detailing his experiences. Coining the term "The Missing Diagnosis," Truss later summarized his unique observations in a self-published book of that title in 1983. He expanded the scientific explanations for these unique perspectives in his sequel, *The Missing Diagnosis II*, self-published in 2009.

Truss' revolutionary concepts came at a time when rampant antibiotic use, refined carbohydrate consumption, and medical infatuation with steroids unwittingly turned many patients into "yeast factories." A wide variety of symptoms unexpectedly improved, irritable bowel discomforts, as did skin conditions, allergies, mood problems, including anxiety and depression, as well as inordinate food cravings associated with obesity and pre-diabetes. The brilliance of Truss' insight is that *Candida* was more than just a superficial infection of the skin or mucus membranes. Rather, its presence triggered a storm of allergic, metabolic, and immunological reactions that affected many organ systems – including the brain. Dr. Truss recognized the diagnostic confusions, since the manifestations vary greatly from patient to patient, depending in part upon the location and extent of tissue colonization, but principally upon the patient's immunologic and allergic response to yeast antigens and to possible toxins released by the fungus.

Pediatric allergist William "Billy" G. Crook, MD, pushed these ideas into the public awareness by his easily understandable trade paperback, *The Yeast Connection*, published privately in 1984 and then by Random House since 1986. He was justifiably excited to share with me sheafs of typewritten pages as he was assembling his book. As I learned from him and others how to "treat yeast," I knew I had to share more academically supported information, and Bantam Books published *The Yeast Syndrome* in 1986.

Let's Get Real

Medical advances are routinely resisted by mainstream practitioners who fail to understand the bases upon which better diagnosis and treatments are evolving. The Yeast Syndrome has been no different – except, perhaps, that such opposition now has a 40-year history…thanks to astonishing ignorance and arrogance.

The formal position of the purported clinical experts, published in 1986, remains virtually unchanged to this day. Their pejorative statements, utterly lacking any serious clinical trials, simply dismiss that The Yeast Syndrome could, in any believable way, explain a great number of conditions with which adults (and children) are suffering, which have been *ineffectively* treated by such "expert allergists" for years:

Candidiasis Hypersensitivity Syndrome – Approved by the Executive Committee of the American Academy of Allergy, Asthma and Immunology: *The alleged basis for the syndrome is*

*described by Crook as follows: Antibiotics, especially broad spectrum antibiotics, kill friendly germs while they're killing enemies. And when friendly germs are knocked out, yeast germs (*Candida Albicans*) multiply. Diets rich in carbohydrates and yeasts, birth control pills, cortisone and other drugs also stimulate yeast growth. Large numbers of yeasts weaken your immune system.*

Your immune system is also affected adversely by nutritional deficiencies, sugar consumption, and by exposure to environmental molds and chemicals (such as formaldehyde, petrochemicals, perfume, and tobacco). When your immune system is compromised and your resistance is lessened, you may feel bad all over and develop respiratory, digestive, and other symptoms. And you're apt to develop adverse reactions to additional foods, inhalants, and chemicals. As a part of these reactions, mucous membranes throughout your body swell, and you develop infections caused by bacteria and viruses that a strong immune system would ordinarily conquer.

When you develop an infection, you're apt to be given broad spectrum antibiotics. Such antibiotics, while at times essential, promote the growth of Candida albicans which depress your immune system. And your health problems continue until the vicious cycle is interrupted by a comprehensive treatment program designed to decrease the growth of Candida albicans and increase your resistance (Crook WG: The yeast connection: a medical breakthrough, ed 2. Jackson, Tenn., 1984, Professional Books, pages 15,16).[2]

Perhaps *someone* could have realized that "the science" was clearly confirming the original observations of Truss. Well…*that would have been nice*.

Steven Novella, MD, an academic clinical neurologist at the Yale University School of Medicine, offered these outright false and fallacious conclusions on his website https://sciencebasedmedicine.org, making the following claims in a post, dated September 25, 2013:

Science-Based Medicine is dedicated to evaluating medical treatments and products of interest to the public in a scientific light, and promoting the highest standards and traditions of science in health care. Online information about alternative medicine is overwhelmingly credulous and uncritical, and even mainstream media and some medical schools have bought into the hype and failed to ask the hard questions.[3]

The site asserts independent and reliable scientific authority: "SBM is entirely owned and operated by the New England Skeptical Society, a non-profit organization dedicated to promoting science and critical thinking."

In this light, you should critically review his following unsupported assertions:

Compromised immunity can lead to overgrowth of the fungus Candida albicans*, but this doesn't happen in people with intact immune systems, and it doesn't lead to the vague, unrelated symptoms described as "systematic candidiasis" by alternative medicine proponents….*

One popular fake illness is chronic candidiasis. Candida albicans *is a fungus that colonizes*

about 90% of the population (meaning it is present in the body but not causing an infection or any problems). It can, however, become an infection, usually at times of stress or immunocompromise. The most common manifestations are thrush (a superficial Candida *infection in the mouth) and vaginitis, also commonly referred to as a yeast infection….*

Over 25 years later Candida hypersensitivity remains an unproven claim, but popular among "alternative" practitioners. The claims have also spread, unhindered by logic and evidence….

Candida hypersensitivity is an implausible syndrome, simply another "one cause of all disease" alternative claim. Such claims are useful only for generating demand for fanciful and worthless treatments.[3]

At least the American Academy of Allergy and Immunology kindly and correctly listed an incomplete number of prominent symptoms that have, in my clinical experience, been dramatically improved by treatment for The Yeast Syndrome:

The symptoms are described as wide ranging, involving multiple systems, and include fatigue, lethargy, depression, inability to concentrate, hyperactivity, headaches, skin problems, including urticaria, gastrointestinal symptoms such as constipation, abdominal pain, diarrhea, gas and bloating, respiratory tract symptoms, and symptoms involving urinary tract and reproductive organs.[2]

Sadly, their chronicle of such *discomforts* blatantly ignores the number of actual chronic *diseases* that can (and often do) appear as fungal interruptions persist and later impair normal physiologic functions. They missed the boat – the horse is already out of the barn – their false presumptions condemn them to subjecting their innocent and trusting patients to a lifetime of suffering, disability, and even death.

Digging their professional grave even deeper – and condemning *their* patients to *never* regaining and maintaining better health by proper treatment – they offered the following, again unsupported assertions:

The Practice Standards Committee finds multiple problems with the candidiasis hypersensitivity syndrome.
1. The concept is speculative and unproven.
2. Elements of the proposed treatment program are potentially dangerous.

On the basis of the evidence so far reviewed and until appropriate published evidence to the contrary is brought to its attention, the Practice Standards Committee recommends that the concept of the candidiasis hypersensitivity syndrome…is unproven.[2]

Poorly designed and conducted "clinical studies" unfailingly reach the desired conclusion with which they began, namely that The Yeast Syndrome is fallacious and ungrounded in any science: "Given the dearth of controlled data on various aspects of this syndrome — including its pathogenesis, diagnostic criteria, and response to therapy — controversy and skepticism persist."[4]

Because Grandma Lives 1500 Miles Away

Did you ever wonder…why are there pediatricians? After all, kids are mostly healthy, and while growing up, they have remarkable resiliency and recover quickly. It all has to do with your cousin Beatrice.

Cousin Beatrice? Yep. In the old days, if you got "sick," your Grandma would reassure your parents, "When your cousin Beatrice got that, we just did such-and-so, and she got better just fine."

Sadly, we have lost most of the old-time cures and remedies. Settlers and pioneers, both on farms and in the towns, were literally "off the grid." They had to rely on herbs and other traditional treatments that exploited your body's natural ability to heal and repair. Lacking these and other effective ways to help our families, we have learned to turn to pediatricians. And a zillion other specialists as well.

The Yeast Syndrome is the archetypal example of how our modern medical approach has succumbed to the Law of Unintended Consequences. Our almost blind reliance in adopting the claims of "scientific advances" has led us down the path where convenient choices have produced complications both unintended and unforeseen, apart from the desired advantages.

Environmental conditions have set the stage for the overgrowth of yeast, almost unhampered by natural defenses that have protected human beings for millennia.

Remember: yeast is *not* the problem…our compromised immune system allows us to be inundated by toxins that progressively damage our physiology, nutritional status, and endocrine functions…and we succumb in ways never before seen.

As evidence supporting Bernard and Béchamp, consider the key factors of how we become "sick" with yeast overgrowth:

A = **a**ntibiotics, widely used, often abused – and microbiome replenishment

ignored leads to reduction of bacteria antagonistic to yeast growth

B = **b**irth control pills – hormonal disruption favoring yeast growth

C = **c**ortisone – in all its flavors – widely used, even over the counter for topical –

favoring yeast growth

D = deplorable **d**iet – more on this later, but sugars and starches favor yeast

growth and nutritional deficiencies impair immune defenses and other systems

E = **e**nvironmental toxins – we're engulfed in more of them every year

F = **f**ull of stress lifestyles – surging of stress hormones alerts yeast to an organism facing challenges, ideal for yeast exploitation

G = **g**enetic predispositions – some people more readily surrender to attack

H = health **h**abits adverse to recovery and repair: reduced sleep, on-the-go hurry-hurry, and so much more

Human beings can withstand many challenges when healthier and "all systems GO"; but when circumstances alter the situation, always-present yeast (especially *C. albicans*) are aroused to grow more readily. Each "event" encourages yeast to flourish more, and finally body systems are unable to meet the threat as debilitating yeast metabolites and toxins ("*Canditoxins*") flood your cells and organs. Welcome to…*The Yeast Syndrome*.

The Allergy and Immunology Monkeys Are Mocking You

Hear No Evil, See No Evil, Speak No Evil. This widely recognized Japanese proverb refers to those who deal with problems by refusing to recognize them, ignoring the goodness of the truth literally in front of them and the results that are available to those who live in the truth.

As a classical illustration how today's "cancel culture" is incredibly effective to bear down on professionals and public alike, to suppress consideration of diagnosis and treatments by having their minions relentlessly parrot the same old stories, the following fake data is promoted by the Rare Disease Database of NORD, the National Organization for Rare Disorders:

Since Candida Albicans is supposed to be present in healthy people, treatment is very rarely needed. The American Academy of Allergy and Immunology has stated that the concept of yeast allergy or Candidiasis hypersensitivity is speculative and unproven. Health foods and vitamins are not effective treatments.[5]

"Tell a lie loud enough and long enough and people will believe it," said Adolph Hitler, in his dark declaration, *Mein Kampf*, and he went on to offer: "It is a quite special secret pleasure how the people around us fail to realize what is really happening to them." American humorist Mark Twain observed: **"How easy it is to make people believe a lie, and [how] hard it is to undo that work again!"**

You Can't Fix "Perfect"!

Patients and practitioners alike fail to understand one profound operation of biology: your body *never* makes a mistake. Whatever it is doing, that is absolutely correct, *given the*

circumstances. Our efforts to slap the system around with drugs is but a futile band-aid, flailing against the functions hard-wired into our systems for survival. Simply put, if you want the body to *do* something different, then you must change the *circumstances*…in response to which, appropriate changes will appear in body systems. *Never* a mistake, *always* the perfect response to the situation presented.

Given this understanding, your body is forever trying to tell us what is "going on." Sadly, we're so busy trying to "fix it" that we aren't listening. Certainly this applies to "taking a complete history." But this also highlights a fundamental problem obvious not only with conventional medicine but also, on inspection, with "functional" medicine and any "casual" understandings of The Yeast Syndrome. Intensive efforts to test for and determine chemical functional aberrations can get caught up in the briar patch and easily miss "the big picture." Prescribing medications or supplements aimed at "correcting" each identified issue is the *sine qua non* of "A-to-B" medical practice: you have "A," we do "B"; you have "C," we do "D." The limits to this approach are *endless* because failure to know and correct the underlying cause will mean adding more items as ever more issues can be identified – focusing on the *trees* instead of the *forest!*

One illustration of how practitioners "get in trouble" (that is, fail to get their patients better) is "3-D chess." If you've played chess, you know that pieces move differently; some go in straight lines on the squares, some go diagonally, and so on. With 3-D chess, pieces can move up or down on 3 levels (each stacked above the other) rather than being confined to just one flat surface. Well, think of your metabolism as having eight boards, each stacked on top of the other. Some pieces can "start here" but end up "over there"! How does this relate to The Yeast Syndrome? A patient might focus on a particular problem – say, a square up on the seventh board and 3 over from each edge – because he has future plans and needs "that" fixed. But the body is busy working in other squares, first on this level then on that and then on another and so on. Remember: your body has a very clear priority: it *must* survive for the next 10 minutes or nothing else matters. While the patient's priority is important, it might be way down the list, with many survival items ahead of it. The delay experienced by the patient is frustrating, "I'm doing all these things and I'm *still* not better with (fill in the blank)." However, the body is attending to priorities in order of critical need, laying the foundation for finally getting all of the biochemical processes more in line. Patience and persistence is the order of the day in order to resolve all the issues related to yeast overgrowth. Remember: no mistakes, just *exactly* what is needed given the current circumstances.

The real treatment for The Yeast Syndrome must rely on changes in our lifestyle, literally *changing the situation* in order to alter your body's responses toward normal. There is no short-cut to better health. **It is a biological imperative: *"We must follow 'the Science'"***

I need your help designing an airplane – got any good ideas? We're entitled to our ideas on this – our opinions – our beliefs. But…the physics of aviation is…*science*. That means, established facts. We can cling to our ideas, our opinions, our beliefs—but we're not entitled to our own facts. They is what they is, period.

The Wright Brothers showed, in 1903, a whole new realm of science for our investigation and exploitation. Over a hundred years of experiments have revealed physics facts that have allowed us to design and enjoy incredible aviation advances today.

Pasteur, Bernard, and Béchamp in the later 1800s blessed us with new understandings of microbes, first observed by the Dutch microscopist Antonie van Leeuwenhoek who accurately described microorganisms (bacteria and protozoa) that he called 'animalcules' (little animals) in 1676. Alabama internist Orian Truss, MD, from 1978 through the 1984 publication of his book, *The Missing Diagnosis*, gave us deeper insights into the physiologic interruptions possible when yeast toxins are elaborated from pathologic growth in our gut, our lungs, our sinuses. *The Yeast Connection* (Tennessee pediatrician William Crook, MD) first published in 1984, explained in simple language how many people get sick (and can get well) when *Candida albicans* "overgrows" unrecognized. *The Yeast Syndrome*, published 36 years ago by Bantam Books, supported these theses with dozens of citations to the scientific literature. Incidentally, we edited the manuscript twice before submission…then Bantam removed one-third of our definitive document, claiming they could not sell a trade paperback of that length. Patients and practitioners forever lost access to those ideas and treatments.

Despite the many disparaging pronouncements from professional organizations and governmental agencies, the *facts* established by science are not "consensus" but *reality*. And therein lies the fundamental fallacy to how most practitioners attempt to "treat yeast": they have heard or read someone's impressions "about yeast" and "about yeast treatment." But sadly they have minimal understanding of the definitive pathophysiology and the corrections that are essential to restore and maintain better health. We could have similar debates regarding the many beneficial effects of vitamin C, well documented since the 1960s by Stanford University chemistry professor Linus Pauling, PhD, and *many* others – but again, we are obligated to recognize and tightly adhere to the constraints established only by…*the facts.*

We can agree to disagree—but you'll be wrong if you dispute settled facts. In the final analysis – which is the health of our patients – ***we must follow the science!***

More recent studies have shown that, despite a psychological bias against "invasion" through the gut and against systemic distribution of the ubiquitous enteric fungus, *C. albicans* may require less opportunism than had previously been considered. High enteric levels (yeast overgrowth!) have demonstrated the ability to spill-over in significant numbers into the host's peripheral circulation. Further, it can shed its characteristic cell wall and vary its cell-surface immunogens, allowing it to camouflage its identity from host immune defenses, permitting proliferation into the systemic circulation as non-transients.[6]

The genome of *C. albicans* is very flexible and can withstand a wide assortment of variations in a continuously changing environment, challenging our usual concepts of fungal infection. While it exists as a harmless commensal in a healthy individual (vagina, oral, and gastrointestinal mucosa), infections can be established when the local microbiota is disturbed, normal tissue barriers are weakened, or an individual becomes immunocompromised. *C. albicans* displays unusual genome dynamics and can transition between different cell types. These adaptive mechanisms to the immune defenses of its human host are very subtle and extensive, and by

these it evades nearly all efforts directed against it at every level. Interestingly, these elegant adaptive responses display a well-adapted parasitism, occurring only in the especially virulent species but not in the less pathogenic other *Candida* species.

My Secrets

Since first learning of the disastrous effects of yeast overgrowth in 1983, I have gleaned a few fundamental understandings that have been uniformly effective in helping to restore and maintain better health for people suffering from varied discomforts and disorders. Even where The Yeast Syndrome is not the definitive problem, in many chronic conditions its imprints are often there. Failure to address yeast overgrowth as well will generally limit the results available when treating other pathologies.

MEVY Diet

First and foremost: once you go out your front door, you are in dangerous territory.

Our "food system" has been corrupted in ways never foreseen a hundred years ago. We used to have farms and gardens. Now we have agri-business. We used to have only organic, wholesome crops. But then…experiments started in 1943 to improve yields of American hemp – *Cannabis sativa* – vital for the war effort. This research blossomed in the late 1940s into sudden and widespread application of fertilizers as ammonium nitrate (no longer needed for explosive weapons), phosphorus, and potassium were used to enhance various harvests. Cardboard-tasting tomatoes are plump and moist but lacking in virtually all the rewards of home-grown fruits.

When populations rely on the "foods of commerce," consisting largely of white flour products, sugar, polished rice, jams, canned goods and vegetable fats, the result is loss of their immunity to dental caries and loss of freedom from degenerative processes, as shown by Weston A. Price, DDS in his 1939 book, *Nutrition and Physical Degeneration, A Comparison of Primitive and Modern Diets and Their Effects.* Price was director of research for the American Dental Association and collected extensive research materials, available from Price-Pottenger Foundation: https://price-pottenger.org/.

As of 2001, the Cooperative Extension of the University of California noted that over 1,000 food items came in cans – often with processing chemicals, preservatives, excessive sodium and sugar, and heating/packaging intended to preserve edibility for years. Not necessarily healthy nutritive value but satisfaction for the belly. Only 13 percent of our food dollar is now spent in grocery stores. We consume 31 percent more packaged food than fresh food.

When Americans want to skip the effort of meal preparation, they eat in restaurants. Or, more often, they head for over 200,000 quick-serve or casual serve restaurants…spending, in 2019, some 51 percent of their total food dollar – about 10 percent of their disposable income! In 1955, when Ray Kroc opened the first McDonald's in Des Plains, Illinois, traditional restaurants claimed only 25 percent. Now about 20 percent of all American meals are…*eaten in the car!*

The US Department of Agriculture determined in 2015 that American households spent just 6.4 percent of their income on food. Nearly 23 percent of that current total is purchasing *processed* foods and sweets. Back in 1900, families spent about 40 percent of their income on food. By 1950, the percentage was just under 30. What should become outrageously clear is that our food production, processing, preparation, and selection are "sweeter and saltier and more efficient and convenient" as we become fatter and sicker.

So, my very first step in helping patients recover with The Yeast Syndrome is to have them modify their eating to the **MEVY** diet: ***M***eats, ***E***ggs, ***V***egetables, and ***Y***ogurt.

In many respects, my program is similar to the low-carbohydrate diet first espoused by my friend, New York cardiologist Robert C. Atkins, MD (*Dr. Atkins' Diet Revolution*, New York:Bantam Books, 1981). The MEVY diet is extensively presented in Chapters 13, 14, and 15 of *The Yeast Syndrome* ("*TYS*"), coauthored with Morton Walker, DPM. Many patients have survived on surprisingly limited food choices, never having eaten a rainbow selection of vegetables. Others claim a dislike for milk products – but daily yogurt intake *often* overcomes that aversion. Homemade yogurt is easy and can be more appealing, and "makers" are inexpensive and easy to use. I encourage patients to create appetizing snacks by adding any of over 200 rich flavors (www.bickfordflavors.com); placing cups in the freezer provides a real treat. Alternatively, stirring in spices of choice can create delightful "dips" for carrots, celery, cauliflower, broccoli, other fresh vegetables. Those with professed "milk intolerance" often can mix into the yogurt Lactrase or Lactaid (lactase enzymes) and do quite well.

Food choices, of course, ideally should be as "organic" and "fresh" as readily available and affordable. The emphasis is on wholesome nutrition and supporting a healthier gut microbiome. Those who fear elevating their cholesterol by eating meats and eggs should take comfort from the 70 years of research summarized by Fred A. Kummerow PhD, in his engaging book written at age 100: *Cholesterol is Not the Culprit: A Guide to Preventing Heart Disease* (Summerfield, Florida:Spacedoc Media, 2014). Those concerned about increasing risks associated with insulin resistance known as cardiometabolic syndrome—first described in 1988 as "Syndrome X" by my friend, Stanford endocrinology professor Gerald Reaven, MD—can find reassurance in his book, *Syndrome X: The Silent Killer: The New Heart Disease Risk* (New York:Simon & Schuster, 2001). Indeed, for many of my patients, their "pre-diabetes" condition improves dramatically when implementing the MEVY program; and Type 2 diabetics often see reduced symptoms and substantially better control, often with lowered medications.

Nutritional Supplements

While healthier eating is essential, recovery from the ravages of The Yeast Syndrome requires addition of general and *specific* nutritional factors, such as vitamins, minerals, essential fatty acids, and the like. As we reviewed, the problem is not "the yeast" but rather "the terrain," the body in which these symptoms are being manifested. In virtually all patients, interruptions to normal physiologic functions have resulted from metabolites and toxic substances produced by overgrowing yeasts. Like dominos, interferences and deficiencies can tumble haphazardly, such that fundamental cellular and endocrine functions are damaged, destroyed, or defeated quickly. Part of the confusion surrounding The Yeast Syndrome is that some patients suffer

sudden and dramatic symptoms while others seem to amble along, only gradually developing discomforts over years or even decades. Biochemical individuality is obvious, and each patient must be assessed and treated appropriately.

Some key tenets have stood the test of time. Yeast overgrowth has usually been associated with magnesium deficiency, relative deficit of pyridoxine (Vitamin B6, cofactor for many magnesium-dependent reactions), and frank scarcity of EPA (eicosapentaenoic acid), an omega-3 fatty acid commonly found in cold-water fatty fish. These and other nutritional challenges are reviewed in Chapter 12 of *TYS*. As you can readily suspect, deficiencies in these and other essential components can result in a broad spectrum of biochemical interferences. In other words, patients can complain of widely diverse symptoms, discomforts, and even diseases while they are suffering with similar degrading functions in virtually all cells and systems. Afflictions will arise first in their "weakest link," which will differ for everyone, and then progress unwaveringly to the next feeble systems, and so on. When "enough dominos have fallen," patient distresses will lead them to seek relief. Sadly, conventional medical approaches will uniformly overlook metabolic interferences resulting from toxic products from yeast. To better identify these issues, I have successfully used Micronutrient Testing from SpectraCell Laboratories (www.spectracell.com), Red Blood Cell Elements Analysis from Doctor's Data (www.doctorsdata.com), and Zone Labs Cellular Inflammation Test Kit (eicosapentaenoic acid and arachidonic acid, www.zonediet.com), among others.

You might have heard of the "Die-Off Reaction," also known as the Jarisch-Herxheimer Reaction (JHR). This was first described in the late 1880s by Adolph Jarisch, an Austrian dermatologist treating syphilis with mercurials and then, in the early 1900s, was recognized also by Karl Herxheimer, a German dermatologist. JHR is an acute, self-limiting, transient clinical phenomenon induced when antibiotics are used to treat infections of bacterial, fungal, and protozoal origin. The mechanism is thought to result from the breakdown of the targeted microbe, suddenly releasing proteins, toxins, and cytokines that provoke inflammation. Symptoms can include body aches, headache, fever, chills, rashes, nausea and vomiting, flushing, fatigue, malaise, perhaps worsening of skin lesions, although more severe reactions are possible, usually starting within hours of starting antibiotic treatment. The severity of JHR appears related to the organism burden in the body.

When I first began treating The Yeast Syndrome in 1983, fully one-third of my patients *refused* to return for their second or third office visit. I was perplexed because clinically their problems obviously could be resolved by reducing their yeast overgrowth and correcting the pestering biochemical interferences. Their common complaint: "I only *thought* I felt bad until I came to see you!" Treating their yeast had triggered a robust JHR that I did not anticipate.

This dreadful situation was preventing patients from restoring their health, enjoying life once again free from many discomforts and distresses. What soon became apparent to me was a different understanding of JHR. Yes, its severity can be related to excessive yeast burden in the body, where a massive amount of proteins, toxins, and cytokines can be released. But additionally – even a minimal body burden of yeast can be provocative of JHR if the treatment administered is notably and quickly effective.

Truss and Crook taught the use of nystatin, the first polyene antibiotic, in treating The Yeast Syndrome. The drug is a "channel-forming ionophore," having both fungistatic and fungicidal activity, binding preferentially to the dominant yeast membrane sterol, ergosterol. The result is formation of transmembrane channels that lead to rapid leakage of potassium and intracellular contents and death of the fungus. In clinical practice, I describe to patients that nystatin literally "explodes" the yeast cells, flooding the area with yeast toxins. In contrast, ketoconazole (Nizoral) and similar "azoles" inhibit the cytochrome P450 14a-demethylase enzyme, hindering biosynthesis of triglycerides and phospholipids, specifically production of lanosterol, a necessary precursor for ergosterol synthesis. I describe to patients that ketoconazole "punches holes" in the yeast membrane, with gradual deflation of the cells and a more controllable "trickle-release" of noxious proteins and cytokines. In the 1980s, scientists had identified at least 20 yeast toxins that directly interfered with human biochemistry. Today, that number is dramatically higher – a toxicity that is appreciated and addressed *only* by practitioners who acknowledge the profound interruptions associated with The Yeast Syndrome.

This realization led to my developing of a program to "ease into" treating The Yeast Syndrome, minimizing the expression of JHR symptoms. After a patient has adopted the MEVY diet for a week or more – where reduced intake of sugars and starches is less stimulating for yeast growth in the gut – I introduce a supplement of caprylic acid (derived from coconut oil) or undecylenic acid (undecenoic acid, from castor bean oil), gradually increasing the dosage and frequency. Either of these gently "squeezes" on the yeast, reducing the enzymatic activity that allows them to become pathogenic. At the same time, I prescribe Zymex-II, a proteolytic enzyme formulation (Standard Process) that appears as well to have salutary effects for the gut microbiome. My suspicion is that the proteolytic component is "digesting" released toxins and cytokines before they provoke JHR symptoms, and I have used other proteolytics when needed.

And *Finally* – Antifungal Medications

Within two or three weeks, I add ketoconazole (Nizoral) or fluconazole (Diflucan) as a once daily dosage for about 6 weeks. This approach is slowly reducing the yeast body burden while minimizing release of toxins and cytokines that can provoke JHR symptoms. After another two or three weeks, most patients are ready for the gradual addition of nystatin, a safe yeast-control medication they will need for many months.

Shouldn't I have more to say about the medications? Not really. My intention is to have the patient arrive, within weeks, on a stable MEVY diet, on needed nutritional supplements, and on nystatin (or Amphotericin-B, a similar polyene). This program, with enhancements noted below, will continue for many months. How long? For as long as we need to repair and restore the disrupted cellular and endocrine functions while we "hold the yeast in check." Many months. Sometimes years. Suppressing yeast growth/overgrowth is needed in order to give your body the opportunity to recover…and *that* is how long we need to treat.

My frustration with many practitioners is that they institute a "yeast treatment program" for just a matter of weeks. Then they advise their patient that "something else must be going on," since their initial symptoms haven't shown enough improvement. Often abandoning most of the principles upon which I have based my treatment of The Yeast Syndrome for almost 40 years,

they embark upon an exploration involving various expensive tests and curious treatments, often with frustrating (sometimes worsening) results as years go by. In failing to understand the pathophysiology of TYS but holding themselves out as capable of treating it, such practitioners have failed their primary duty to their patient. (Truss offered an excellent review on his evolving approach, including injections of yeast antigens – one that I rarely have used: Truss CO. Restoration of Immunologic Competence to Candida Albicans. *Orthomolecular Psychiatry*. 9(4):287-301, 1980.)

If yeast toxins and the resulting interferences in biochemical and endocrine functions are the root of the patient's problems, failure to appropriately treat these impairments sets the stage for continuing symptoms, year after year. Often patients will say they "feel better" when doing other alluring treatments – but they're never quite well. Percolating yeast toxins continue to antagonize their physiology because their practitioner *abandoned* the only program that could control the yeast overgrowth and allow for restoration of better health. If yeast producing toxins is their problem, then treatment *must* be aimed at reducing yeast overgrowth and the continuing damage to their biological environment. Close counts only in horseshoes, hand grenades, and shotguns. Treatment for TYS is specific – and can be very effective to restore normalized cellular terrain.

Hamlet's Struggle Was Real!

We immediately think of "To be, or not to be: that is the question." But perhaps he was squaring off against many who failed to see the correctness of his position: "Though this be madness, yet there is method in't." Just like treatment for TYS!

But let us pause to consider: "To meat, or not to meat: that is the question." As more people investigate the challenges presented by the defective Standard American Diet ("SAD"), the pressures of fast-food ("quick-serve") restaurants, and the increasing use of unpronounceable additives (some literally toxic), preservatives, flavorings, canola oil, and such, a variety of approaches have been proposed. Many of these are espoused for those suffering with chronic diseases, cancer, and other aging conditions. And many focus on reducing dietary intake of meat products. The potential consequences of gradual malnutrition can be deleterious and far-reaching.

"Farm meats" are *vastly* different *now* than "free range meats" of many decades past – now we are exposed unwittingly to hormones, antibiotics, and fattening feeds used to bring the greatest poundage (profit) to market. Indeed, everyone gets low level deleterious exposure to those antibiotics *and* to many bacteria that have been able to develop resistance to them! We used to have farms and ranches, now we have agri-business. When affordable and possible, intake of free range "organic" meats clearly can have benefits for longer and healthier life unless a personal choice intervenes.

But…the definition of "meats" can have many interpretations: beef, buffalo, elk, deer, lamb, pork, rabbit…chicken, turkey, duck, pheasant, dove, emu(?)…fishes – freshwater, saltwater, deep water, lobster, crab, crawfish, shark, squid, eel, turtles, and so on. And each of these categories can have products marketed as free range, farmed, fresh-caught, organic, and so

on. Some dietary plans also exclude eggs as meat products, also milk, yogurt, and cheeses. So – the MEVY diet has to be adapted to one where these particular preferences can be accommodated – and adjustments likely will be needed over time.

There are many variations of the vegetarian diet, making for an entertaining challenge: an ovo-lacto vegetarian diet includes both eggs and dairy products (easiest to assist!), an ovo-vegetarian diet includes eggs but not dairy products, and a lacto-vegetarian diet includes dairy products but not eggs. As the strictest of vegetarian diets, a vegan diet excludes all animal products, including eggs and dairy (yes, most difficult to manage!).

Each of these diets that intend limitation of meat-related proteins poses certain risks for nutritional deficiencies: amino acids, minerals, vitamins, even fatty acids. Beyond your professional effort to treat TYS while adjusting for MEVY limitations, you *must* address basic nutritional maintenance. Lingering deficiencies can create or enhance disease conditions, worsen overall health, and shorten lifespan…and these dietary issues might also represent underlying digestive dysfunctions that *must* be corrected for your treatments to be successful.

Protein-energy malnutrition/undernutrition is a very real prospect, especially for people who have been limiting intake for years. Symptoms can include or mimic those of TYS as well: muscle loss (even contradictory sarcopenic obesity), weakness, fat loss, edema, fatigue, depression, loss of appetite, immune impairment, osteopenia, aggravation of inflammation (inflammaging), alterations in microbiome, and the body simply "not working" as it usually would. Each of these factors can amplify any of the others and they all join in cumulatively, confirming my assertion that "aging is not a natural calendar process but rather a disease happening one day at a time."

One major cause of protein and mineral deficiencies is simply not getting enough essential nutrients from food or supplements. Many vegetarian programs rely heavily on beans, peas, lentils, nuts, seeds, and soy products. An overdependence on soy can lead to hormonal imbalances. Various grains and rice often are prominent choices. Reliance on these products – along with fruits – to the exclusion of vegetables can lead to excessive starches and sugars, encouraging the growth of gut yeast. Careful counseling is required, including advising patients that a much longer and more regulated treatment program is needed to resolve TYS.

Adding spices and herbs to meals and snacks can help boost flavor and eating interest. Choosing acceptable high protein drinks can help nutritional replenishment, including shakes, smoothies, and milk (especially unpasteurized/unhomogenized, when that is the patient's choice), as well as high protein bars. When acceptable, choose seafood options that are higher in beneficial fatty acids (omega-3s) and lower in methylmercury, such as salmon, anchovies, and trout. Remind patients that many (most?) packaged foods (including meal replacement bars) rely on canola (rapeseed) oil rather than more healthy oils.

Are these special challenges? Of course! These patients will require your devoted and continuing attention – and often they will stretch your understanding and your continuing search for more knowledge. Helping these folks will dramatically enhance your care of all patients in the future. You will succeed more often with those who give greatest credence to Hamlet: "You

cannot, sir, take from me any thing that I will more willingly part withal: except my life, except my life, except my life."

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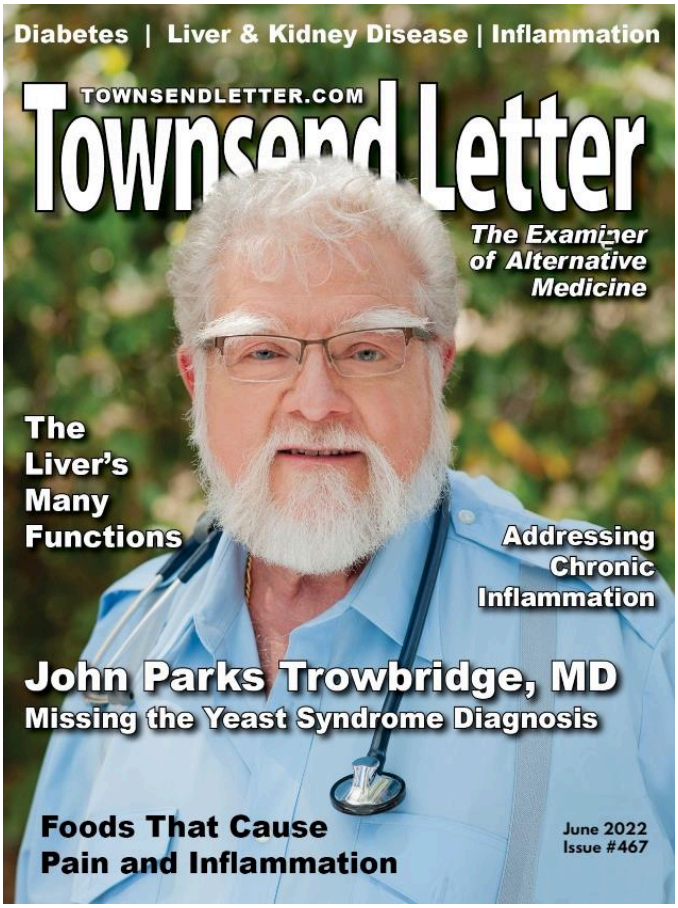
John Parks Trowbridge, MD, recognized for a career of innovative integrative solutions, has been named a Marquis Who's Who Top Doctor in Advanced Medicine and a recipient of the Alfred Nelson Marquis Lifetime Achievement Award. An Eagle Scout and then a National Merit Scholar educated at Stanford, Case Western Reserve, Mount Zion Hospital (now a U. C. San Francisco campus), the Texas Medical Center, and the Florida Institute of Technology, his exceptional experiences in medicine, surgery, and nutritional technologies encouraged him to ask provocative questions. His persistent curiosity in resolving perplexing issues has enabled him to find effective answers. Serving for years as a senior aviation medical examiner for the FAA, a "company doc" for 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, has lectured around the world, has produced dozens of hours of CDs and DVDs, and has authored many articles and several books, all sharing his unique perspectives. He and his devoted staff at Life Celebrating Health near Houston, Texas, continue to welcome those who insist on enjoying a healthier future: 1-800-FIX-PAIN, www.healthCHOICESnow.com.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John Parks Trowbridge, MD
Missing the Yeast Syndrome Diagnosis
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Still Missing Diagnosis of The Yeast Syndrome? – Part 2

By John Parks Trowbridge, MD, FACAM

In Part 1 (*Townsend Letter,* June 2022), Dr. Trowbridge explains the history of The Yeast Syndrome, describes its symptoms and underlying causes, and outlines the primary treatment components.

When Christopher Columbus set forth across the Atlantic from Spain in 1492, he was seeking a direct route to the East Indies, hoping to capitalize on the lucrative spice trade. As with the best laid plans in many fields, his understanding of the *terrain* was slightly "off." Still, he made history as the first European contact with the Caribbean, Central America, and South America. His "Indians" were…well, you know the rest. Interestingly, the name was assigned also to the American natives inhabiting North America proper.

So how does this history relate to The Yeast Syndrome? Since the time of Dr. Truss' initial observations, *ad hominem* attacks and unsupported criticism from various professional groups have discouraged practitioners from investing the time and effort required to understand and embrace proper treatment. While published studies document the pathophysiology creating their discomforts and diseases, innocent patients are directed to *other* conventional (and even integrative) *in*effective approaches. And in most instances, they continue to suffer. For years.

Research requires funding as well as dedicated interest by investigators. Both are in short supply. All of us should take heart in the 1999 Mayo Clinic findings in patients with chronic sinusitis…but sadly few practitioners know of this exceptional report. The physicians were excited when documenting nasal fungus in *96 per cent* of 210 patients. Early reports noted that further research at Mayo was underway to confirm that the immune response to the fungus is the cause of the sinus inflammation, hopefully to help relieve 37 million sufferers.

"Medications haven't worked for chronic sinusitis because we didn't know what the cause of the problem was," says Dr. Ponikau. "Finally we are on the trail of a treatment that may actually work."

"Fungus allergy was thought to be involved in less than ten percent of cases," says Dr. Sherris. "Our studies indicate that, in fact, fungus is likely the cause of nearly all of these problems. And it is not an allergic reaction, but an immune reaction."

"This is a potential breakthrough that offers great hope for the millions of people who suffer from this problem," says Dr. Kern. "We can now begin to treat the cause of the problem instead of the symptoms."[7]

Despite this enthusiastic report, you should not be surprised that there's no limit on challenges from the medical community, such as this from two Utah otolaryngologists:

" … [S]ubsequent clinical trials of topical and systemic antifungal treatments have failed to demonstrate meaningful efficacy. …. Combined with clinical data about antifungal therapy's ineffectiveness, these findings appear to tip the scales against fungus as the universal etiology of CRS [chronic rhinosinusitis]."[8]

And from these specialists in The Netherlands, reviewing the literature and offering merely their opinions – but *no* experimental evidence:

- "Presently, in the absence of convincing immunological data and evidence for clinical improvement of CRS upon therapy with antifungal agents, the case against the fungus remains unproven."[9]
- "There are not many arguments to suggest a causative role for fungi in CRS with or without nasal polyps. However, due to the intrinsic or induced change in immunity of CRS patients, fungi might have a disease-modifying role."[10]
- "Almost a decade after the launching of the hypothesis by Ponikau, the absence of convincing immunological data or evidence for clinical improvement of CRS upon therapy with antifungal agents now means that the hypothesis that fungi play a role in a majority of the cases of CRS has to be rejected and antifungal treatment should not be used."[11]

Pause for just a moment: what you're witnessing is terribly disturbing. Ear-nose-and throat specialists generally have no clue on definitive ***treatment*** of The Yeast Syndrome, which could resolve chronic sinus inflammation and infection. So their published *opinions* that weave their way unceasingly through the medical literature are flagrantly ***wrong***. Is this an arrogant pronouncement offered by a solo general physician who has decisively treated the vast majority of such patients for almost 40 years? It ain't arrogance if it's right. And it is right.

The Mayo Clinic physicians literally hit the nail on the head: "because we didn't *know what the cause* of the problem was" and "We can now begin to *treat the cause* of the problem instead of the symptoms." For 24 years, *Know the Caus*e,the wildly popular (now global) daily television program, has been hosted by Doug Kaufmann. I met Doug over 40 years ago – he taught me about food allergies. Over 30 years ago, I shared with him much of what I was learning about yeast overgrowth, my diet ideas, nutritional supplements, and medications. Working with Dallas physicians, he concentrated on clinical nutrition and the role of fungus provoking both symptoms and diseases. Doing more than any other individual to share these critical ideas, this talented former Navy medical corpsman and his production team find ways to enlighten and educate viewers around the world of the wide range of health problems associated with fungi/yeast/mold/mildew. [https://knowthecause.com]

But wait, there's more! I know you think you understood what you thought I said, but I'm not sure you realize that what you heard wasn't what I meant. Missouri poet Maya Angelou says it very well: "I've learned that I still have a lot to learn."

In medicine, a broad definition of "syndrome" is used, which describes a collection of symptoms and findings without necessarily tying them to a single identifiable pathogenesis. When a syndrome is paired with a definite cause, this becomes a "disease." Medical definitions of the disease state are lacking or insufficient. The World Health Organization offers that "In general, disease is defined as any harmful deviation from the normal structural or functional state of an organism, generally associated with certain signs and symptoms and differing in nature from physical injury. A diseased organism commonly exhibits signs or symptoms indicative of its abnormal state."

Confused yet?

Yep, part of the problem with modern medicine in the digital world is that doctors are looking to stuff every condition into a digital "cubby-hole," a small mental compartment operating as specific diagnostic category, especially an overly restrictive one. Once assigned to a cubby-hole, less attention needs to be paid to resolving a patient's complaints – "Nothing new, patients with *that* diagnosis get *those* kinds of problems."

This should become obvious: The Yeast Syndrome fails to "fit into" the modern medical paradigm. Conventional physicians can feel comfortable denigrating, dismissing, and ignoring practitioners who treat "yeast overgrowth" because TYS is simply irrational at best and deceptive at worst. As critics submit, "you claim that *everything* can be caused by yeast" – so they can feel righteous in disregarding any evidence of clinical improvements. Mainstream medicine recognizes invasive fungal infections occurring in various categories of patients, including those with cancer, burns, as well as patients with AIDS or undergoing organ transplantation. But they resist accepting that apparently "healthy" patients (whose standard blood panels are "normal") can suffer debilitating symptoms for years because unsuspected, undiagnosed, and therefore untreated yeast overgrowth injures their biochemical and endocrine functions. Some laboratories can identify "mold toxins" present in blood tests – but even these clearly abnormal findings fail to persuade conventional physicians to consider TYS.

Indeed, an incredible range of symptomatic complaints has been associated with The Yeast Syndrome. Not in the same patient, of course, but we have documented reduction of discomforts and distress along with impressive clinical improvements in many patients over the years. This should lead to the question: So, how can you diagnose "yeast overgrowth."

Some presentations are obvious: persistent thrush, recurrent vaginitis, endless skin rashes. Others are insidious, such as impaired memory, reduced mental capacity, headaches, altered sensations, fatigue, and many more. The *sine qua non* of correct diagnosis is, of course, virtually full recovery when treated appropriately for The Yeast Syndrome. Reliance on this admittedly different approach does little to assuage or assure medical critics.

With seemingly boundless physical and mental complaints possible, do we have other diagnostic options? Sort of. My friend California immunopathologist Edward Winger, MD, developed an "anti-Candida antibody profile" in the mid-1980s. [Available now from LabCorp, test code 096719, Candida antibodies]. Casual exposure to microbes stimulates an immune response, but this is minimal when an "invasion" does not appear threatening. But when your defense system

begins creating antibodies against antigens that are found only *within* yeast organisms, *that* finding is suggestive of contents spilling from harmful yeast overgrowth. Sadly, practitioners have little training interpreting immunological reports – so when detected antibody levels are *not* elevated, they wrongly leap to the conclusion that "yeast is not the problem" and wrongly direct their attention elsewhere. Certainly that *could* be the conclusion…but patients whose defenses have given up fighting an overwhelming yeast presence *could* be demonstrating immune tolerance, as Dr. Winger and I easily demonstrated. These patients are "sicker" and require definitive treatment management.

Is there another way to evaluate patient complaints, especially when the anti-Candida antibody test appears "negative" ("normal")? Now we're back to old-fashioned diagnosis: questioning and listening long enough to create a sweeping understanding of the patient's history, exposures, illnesses, medications, prior treatments, and current complaints. You might have heard of the SF-36 questionnaire. RAND corporation developed this 36-Item Short Form Health Survey as a set of generic, coherent, and easily administered quality-of-life measures. These measures rely upon patient self-reporting and are now widely utilized by managed care organizations and by Medicare for routine monitoring and assessment of care outcomes in adult patients.

Realizing the patient management value of such data, years ago I developed my own "short form" of 42 items, where *every* patient, at *every* visit, rates his or her current discomforts on a scale of zero to 10. Many patients suffering with The Yeast Syndrome have a dizzying number of 7's, 8's, 9's, and 10's. [To obtain a copy of my form, send your request and email address to info@healthCHOICESnow.com]. Their "major complaints" guide our discussions, testing, and assessment. Proper treatment for their yeast overgrowth (along with other medical issues) leads to many having sustained lower scores (0's, 1's, 2's) and markedly fewer disturbing issues in their future. In the 20th century, before physicians had laboratory tests and pharmaceutical treatments, clinical improvement was a standard measure. Now, however, critics demand Pasteur-like identification of organisms and ever more esoteric "tests" of chemical components. Is the *patient* "better"? Who cares!

Fixing the Dominos That Have Fallen

Remember where we started: *yeast* is *not* the problem. The patient has succumbed to an overgrowth of yeast because of other challenges that have compromised their protective responses. Each of these must be addressed – but further, increasing concentrations of yeast elaborate ever greater volumes of metabolic and toxic substances. These interfere with usual cellular functions, finally impairing critical organ functions. As physiologic efficiency is steadily more impaired, maintaining "health" becomes a precarious uncertainty. Many people, especially younger and middle-aged adults, often "soldier on," ignoring nuisance discomforts or hoping for minimal treatment to help.

Indeed, these various symptoms and distresses doggedly worsen, becoming more than just an annoyance but a frank interference to daily life. Time to hop on the medical merry-go-round. A brief visit (aren't they all?) to the local doctor often delivers a reassuring "you're ok, your blood tests are fine." That scenario can be repeated time and again, maybe even with referral to a

specialist or two or more. Eventually, medications are offered…such as for depression or anxiety, which can be expected when complaints to physicians produce little or no improvement.

How about helping these fine people trying to recover from afflictions unknowingly due to The Yeast Syndrome – because…it just *ain't that hard!*

We've already reviewed various nutritional factors that are targeted by yeast toxins. In addition to restoring needed elemental components, a quick look at digestive capability is essential. Indeed, *many* suffering with TYS offer chronic gut complaints: reflux, heartburn, belly bloating, constipation, diarrhea, even belly pains, understandable because the gut can become a toxic waste dump churning with pathological yeasts. Many have been reassured by gastroenterologists that "nothing is wrong" or "you don't have anything to worry about." How about getting a simple (but old time!) urine indican test. If "positive," your patient is not sufficiently digesting proteins in the stomach and upper small intestine. So…you order a comprehensive stool analysis, to find whether you should offer betaine hydrochloride or pancreatic enzymes or both. Patients who have gallbladder complaints (even after having had theirs removed) can benefit from bile acid salts as well. Butyrate deficiency must be replaced for optimal epithelial function, specifically to help "leaky gut." While recovery of digestive functions might occur over years, many people will benefit from lifelong use of needed supplements.

Constipation? Diarrhea? "Irritable bowel" (*that's* both!)? Many patients will resolve even long-standing complaints with nothing more than the MEVY diet and perhaps digestive support. Otherwise, I have a patient take a heaping teaspoon (up to tablespoon) of psyllium seed husks (tastes like cardboard) each morning and evening – and after *each* loose stool if any – regardless of their initial complaints. Even though fiber is an essential but usually missing component for our dietary intake, realization of its profound health benefits is quite recent. Irish surgeon Denis Burkitt, MD, spent 20 years in Africa, where he first described a B-cell non-Hodgkins lymphoma spread by mosquitos. Perhaps more importantly, he realized that many Western diseases rare in Africa were the result of diet and lifestyle. Dr. Burkitt extended and popularized the recognition of dietary fiber as reducing the risk of bowel cancer, and the incidence of diverticular disease, irritable bowel syndrome, appendicitis, varicose veins, hemorrhoids, diabetes, obesity, coronary thrombosis, atherosclerosis, peptic ulcer, and dental decay.[12]

In addition to digestive support as noted, "heartburn" (esophagitis) can be resolved for many by sipping all day long on aloe vera. We used to mix half-and-half with papaya liquid, but that is almost impossible now to find or afford. Dissolving or chewing papaya tablets helps many people. Slowly dissolving a clotrimazole 10 mg troche – four times a day, before meals and at bedtime to start, decreasing as improving – can help esophagitis and also periodontal disease. Slowly dissolving nystatin powder one-fourth tsp can work as well…*but the taste!* Surprisingly, 47 per cent of adults 30 and older have periodontal disease. That rises to 70 per cent in those older than 65 years. To help patients with gingivitis or receding gums to avoid periodontal surgery, I have had many years of success by adding twice daily use of an ultrasonic electric toothbrush (soft bristles, brush lightly) with Tooth Chips Spritz Liquid Tooth Soap by Rose of Sharon Acres. Bleeding and tender gums can resolve within weeks. Some patients have

added “MMS,” also known as “Miracle Mineral Solution,” as an oral mouthwash. This product generates chlorine dioxide, which has received considerable study as an antiviral/antibacterial since the onset of the COVID-19 epidemic. While helpful for reducing plaque, gingival inflammation, and bacterial counts, patients should be cautioned to avoid swallowing the solution (some popular press books promote it as a solution for many diseases – but oral intake can be dangerous).[13]

Research shows perhaps more than 1,000 bacterial species spread on the tongue, teeth, gum, inner cheeks, palate and tonsils. Periodontopathic bacteria contribute to systemic diseases including diabetes, respiratory and cardiovascular cases. The World Health Organization defines probiotics as “live microorganisms which when administered in adequate amounts, confer benefits to the health of the host.” Conventional practitioners are not yet persuaded that yeast contribute to these problems. My approach to resolving oral pathology with dietary guidance, digestive support, aloe vera, clotrimazole or nystatin, and fluoride-free dental soap with an ultrasonic electric toothbrush has been uniformly successful. I have not yet had occasion to prescribe any of the recently developed oral-targeted probiotics. Incidentally, discrete areas of your body have their own unique microbiome, such as gut, mucous membranes, respiratory tract, urogenital tract, and so on. Further, each person has his own unique microbiome, in every biological site.

As an aside, root canals are a safe haven for microbes, including yeast. Because no blood reaches the inside of the tooth, the immune system cannot kill any microbes percolating in the dead tooth. Some 24+ million root canals are performed in the United States each year. *They were proven deadly disease agents in 1925 in a study by Cleveland dentist and head of research for the American Dental Association, Weston A. Price, DDS, and 60 prominent researchers. Cancers have been related to root canals on the same energy meridian.*[14]

Dental/oral abscesses – often persistent or recurrent – usually have a yeast component with the bacterial invasion. The condition can lead to systemic problems throughout the body. Dental amalgams – so called “silver fillings” that are actually 50 per cent mercury – have been associated with significant damage to body systems, especially immune defenses. As such, mercury vapors percolating continuously from “filled teeth” might slow or limit results when treating The Yeast Syndrome. Mercury-safe/mercury-free dentistry is promoted by the International Academy of Biological Dentistry and Medicine (iabdm.org).

The gut microbiome is incredibly diverse, complex, and massive in volume. Studies show how it interacts with us in several ways in health and disease, including (1) modulating the inflammatory host response to the gut, (2) synthesizing small molecules and proteins that are taken up by the host, (3) changing the amount of available energy in the diet by fermentation of polysaccharides to short-chain fatty acids, and (4) interacting in any number of physiologic processes. Abnormal patterns to be understood include “leaky gut,” dysbiosis, and SIBO (small intestine bacterial overgrowth). Modern thinking is that biochemical (even genetic?) factors elaborated by the microbiome can dramatically influence our behavior, memory, thinking, mental disorders, as well as diseases in different systems. Studies of biofilm communities reveal entangled and pathological ecosystems beyond our imagination, resistive to normalization. Dietary choices, fiber, food additives – even lifestyle factors such as cigarette

smoking, alcohol consumption, and recreational drug use—predispose us for earlier and more dramatic deviations. Curiously, less research appears to be devoted to gut fungal organisms … which might be key participants in perpetuating pathologic patterns.

Not only do antibiotics variably impact organisms of the gut microbiome, more alarmingly has come the realization that this is a reservoir of antibiotic resistance genes. Even the minimal exposure we get to antibiotics through the food chain might predispose us to development of inflammatory and metabolic diseases later in life. Béchamp's concept of the biological terrain takes on entirely new dimensions. Research into prebiotics and probiotics has failed to give us clear direction in accurately choosing products to "move" a maladapted pattern toward a more optimal status. Further, we have little clinical data regarding the time needed to do so. A distorted microbiome unmistakably maintains stability in the face of dietary shifts and likely most other modifications.

Given the obvious proliferation of yeast and fungal organisms when antibiotics reduce the presence of competing bacteria, I always recommend concurrent (and extended) treatment with systemic antifungals. Ketoconazole and fluconazole readily penetrate into many tissues, while itraconazole penetrates preferentially into tissues with high lipid content. Nystatin and amphotericin B, both polyenes, more predictably remain in the gut. In my clinical experience, concurrent aggressive treatment with one or more antifungals is absolutely indispensable when addressing deeper tissue infections: persistent sinusitis, pneumonia, pyelonephritis, diverticulitis, lympadenitis, and wounds or cellulitis. This approach emerged from a *Eureka!* moment shared in 1985 with my friend, Pittsburgh internist Milan J. Packovich, MD, as we were listening to a lecture reporting on infecting rodents with streptococcus and with Candida in varying protocols invariably led to finding viable bacteria in the kidneys, contained *within* an insulating "yeast shell." Excitedly over lunch we realized that our patients suffered with frequently relapsing episodes of diverticulitis, pyelonephritis, pneumonia and the like because of our failure to "eliminate" the offending bacteria, persisting because they were being protected by a yeast wrapper…only to emerge again when the terrain was inviting. Since that time, thankfully I have never needed to hospitalize an "upright" patient presenting with any of these conditions.

Another round of drinks for the boys! Well, not really, but that introduces a fascinating but little known and underreported condition: Auto-Brewery Syndrome.[15] Also known as gut fermentation syndrome, it is a rare disorder characterized by the *endogenous* production of alcohol. The victim presents with signs of alcohol intoxication, such as staggering gait, slurred speech, gastrointestinal distress, and state of confusion. Symptoms can arise suddenly and are associated with sugar and starch intake not alcohol – but specific yeasts in their gut manufacture ethanol that is absorbed just as readily as that from beer, wine, or hard liquor. Antibiotics and other factors create microbiome imbalances where pathologic yeast overgrowth is possible. Aggressive treatment for The Yeast Syndrome is essential – along with *strict* dietary controls. Some of these folks draw attention because they have fallen asleep behind the wheel at a traffic light. I have lectured to defense attorneys, because innocent lives should be protected, but prosecutors, judges, and even juries honestly struggle with these medical issues.[16]

One more gut-wrenching revelation: gluten "intolerance" is rarely that … and almost never celiac disease. People often have the misunderstanding that they suffer with this autoimmune

disorder that damages the small intestine and inhibits absorption of nutrients, where they cannot tolerate gluten, a protein in wheat, rye, barley, and in some commercial products. Symptoms can vary widely from almost none to marked discomforts and other issues. More than 90 per cent of actual celiac patients have two HLA genetic markers; negative tests make the disease highly unlikely. Several antibody tests can aid in diagnosis and monitoring. Fewer than 1 per cent of Americans have celiac while up to a third claim to be "avoiding" gluten. So why do people claim they feel much better when they curtail gluten-containing foods? Could the reason be that by reducing grains they are dramatically *reducing exposure to yeast*…and often adding more vegetables to their diet?

One last mention of autoimmune conditions: The Yeast Syndrome is often provocative to your defense system. The broad range of autoimmune diseases that have a documented relationship to TYS is definitive and growing. An excellent review was offered as early as 1985 by California clinical ecologist Phyllis L. Saifer, MD, MPH, of the "autoimmune polyendocrinopathy immune-dysreglation candidosis hypersensitivity" (APICH) syndrome. [*TYS*, pages 325-334]. Needless to say, many of these conditions can improve quite dramatically with proper and continuing treatment for yeast overgrowth…not needing cortisone, chemotherapy, or newer advertised immunosuppressive medications (-imabs, -umabs, -ercepts, and so on). Food allergies often accompany TYS, sometimes complicating dietary choices, and proper treatment can help resolve many of these. A unique panel using lymphocyte responses to assess several aspects of disordered immune activation is the hsLRA-ELISA/ACT, developed by internist and clinical pathologist Russell Jaffe, MD, PhD, to address the hidden causes of many health concerns (elisaact.com). A number of other excellent laboratories offer food allergy test reports that can be helpful as well.

Hold Yer Horses, Cowboy!

You might be chomping at the bit, ready to treat TYS right away. A few other issues need assessment, so your programs can work best. Hormonal interruption ["APICH"] is a common feature found in these patients, and this must be addressed to help resolve symptoms quickly. Many with TYS present with the non-specific complaint of fatigue. Thyroid appears to be the first gland affected by yeast toxins – and mild thyroiditis is not an uncommon finding.

My approach is to establish baseline results, drawing T3F/T4F/TSH/Thyroid antibodies and, if the patient has been taking supplemental thyroid, also T3R. I have them note basal temperature on awakening, before stirring. Best results are with axillary temps, usually for 5 to 10 minutes to stabilize readings. American professor of endocrinology Broda O. Barnes, PhD, MD, realized that hypothyroidism could be associated as well with chronic headaches, repeated infections, unyielding skin problems, or circulatory difficulties, even a major factor in heart disease, lung cancer, and emphysema, and even many emotional and mental disturbances.[17] Despite his persuasive studies, mainstream medicine has failed to accept his hypotheses.

Bringing baseline temps up to between 98.0 degrees is often best titered with compounded T3 hormone (depending on test result and patient's weight), especially watching pulse. Further, unless they claim an allergy, I assess iodine status by having the patient "paint" a silver-dollar-size circle once daily and documenting how "dark" the spot remains in 24 hours (apply to

different areas!). Deficiency can take many months to replenish, using Iodoral or Lugol's iodine. Hypothyroid status often associates with adrenal exhaustion as well. I rarely order any tests but advise supplemental support. Some patients also do better with addition of hydroxycortisone, 5 mg twice daily, slightly below the usual physiologic production, giving the adrenals time to rest and restore.

Complicating thyroid and adrenal compromise often is mild glucose intolerance – setting the stage for prediabetic changes. Many of these patients will improve simply with the MEVY diet. Others will benefit from nutritional supplements known to improve sugar management. Occasional fructosamine and glycohemoglobin will help document improvement but usually I rely on overall symptomatic changes. Dr. Saifer noted changes can occur with female and male hormones as well. Evaluating these issues and carefully rebalancing can help resolve many complaints. Additionally, bringing DHEA and pregnenolone levels to mid- or even high-normal levels appears to accelerate clinical improvement.

Undiagnosed toxicity can be confusing, where a compliant patient doesn't seem to recover as expected. A probing history can reveal exposure to various uncommon chemicals, usually related to employment. Estimates in the 1970s suggested 60,000 chemicals in use with several thousand added annually. The Environmental Protection Agency has more than 85,000 chemicals listed on its inventory of toxic substances. Little is known about which are actively used – or even their long-term side effects. Some estimates are of more than 700 drugs or toxic substances present in our bodies.

Pollution is the largest environmental cause of disease and premature death in the world today. Diseases caused by pollution were responsible for an estimated 9 million premature deaths in 2015 – 16% of all deaths worldwide – three times more deaths than from AIDS, tuberculosis, and malaria combined and 15 times more than from all wars and other forms of violence.[18] Given this disturbing realization that we are immersed in a sea of damaging and deadly chemicals, is it any wonder that our immune (and other) systems suffer, making us more prone to developing TYS?

Documenting such toxicity can be challenging – but "treatment" with the sauna protocol described by L. Ron Hubbard could provide welcome relief.[19] Home infrared saunas are readily available for frequent use and ideal control of temperature and time (www.HighTechHealth.com; www.realaxinfraredsauna.com). My protocol limits exposure to 125-130 degrees, up to 30-45 minutes, for productive sweating – with adequate hydration.

Given the pervasive presence of toxic metals in our environment, many patients will show significant levels on a DMSA-challenged 24-hour urine collection (www.doctorsdata.com). Excessive lead, mercury, and arsenic are common findings – and these clearly impair immunologic, neurologic, and other system functions, easily associated with widely varying symptoms. Reducing the toxic body burden by proper chelation techniques might be the key to unlocking delays or limitations in recovering better health, especially in those already suffering with TYS.

Let's do a quick tour of so-called "minor" yeast issues. Any one of these might create lingering insults to your immune system, making adequate resolution difficult. Onychomycosis is extremely common in adults, progressing to severe distortion of nail structure – on fingers as well as toes. My program is uniformly safe and often effective: at bedtime, make a paste of baking soda, smear onto nails, and wear socks (or gloves) to reduce spreading powder in bed linen. In the morning, rinse off, dry, and smear Dr. Blaine's Tineacide onto nails. Difficult cases might take many months – and I advise continuing for at least three months after nails appear healthy, to reduce reemergence of yeast/fungus from the nail root. This treatment works well with persistent paronychial inflammation/infection around nail margins. Many patients also have "dry flaking skin," irritations, or even cracks on the soles of their feet, also between their toes. Often this is a deficiency of EPA fish oil, which must be corrected – and nightly (or twice daily) massage with coconut oil or Udder Butter (from the feed store) can improve skin condition within months.

Chronic or recurrent vaginitis is all too frequent, and resolution is critical for patient comfort. I have heard that some doctors prescribe one or perhaps three oral Diflucan tablets. Remember, the problem is not the yeast but the body terrain. I have a variety of treatment protocols, one of the simplest being nightly use of an over-the-counter yeast cream such as Monistat (miconazole 2% vaginal cream), sometimes for weeks. Of course, at the same time, I'm treating the patient for The Yeast Syndrome – *that* is the key! Sometimes a short boost with Terazol (terconazole) 80 mg vaginal suppositories or vaginal cream 0.4%-0.8% will help greatly. I discourage any douche, just treat as advised and wear a panty-liner. When a patient is recovering well, I encourage "yogurt douche" each evening using a 30-60 cc syringe or a small douche bag, using plain yogurt. The goal, of course, is to normalize the terrain. Studies have shown that recurrent yeast infections can be the very same organism – when conditions were "unfavorable," the microbe simply sprouted hyphae and burrowed into the vaginal wall, coming out again at more propitious time.

"Jock itch" isn't just for guys—women can have superficial yeast irritations in their inguinal folds as well. The simplest treatment is Nizoral (ketoconazole) 2% cream, applied liberally twice daily and continuing for weeks after all symptoms are gone. Of course, treatment for TYS is helping at the same time. An old wives' tale is the use of corn starch when babies have "diaper rash." That is nothing short of stupid – just cover liberally with yogurt until resolved. Again, the baby likely has yeast overgrowth in the gut (thrush and deeper), often from treatments with antibiotics without worrying to replenish gut flora. A useful product is Miracle II Soap, a coconut-derived soap, cleaner, degreaser, and deodorizer all in one. I personally have used it (sparingly, it's powerful and gentle) for many years as a shampoo, face and body wash, hand cleanser, and even laundry detergent.

Rashes on the hands, arms, other body parts might be a bit more complicated. Many times this is diagnosed at "psoriasis," which is fine by me, since that is associated with TYS. Again, I endorse local care—Nizoral 2% cream, Udder Butter, coconut oil – until treatment for the deeper yeast overgrowth creates the terrain for healing. Resist the temptation to apply steroid creams (even ones combined with antifungal medication), since that is more like taking 3 steps forward and 2 steps back. Cheilitis is a special case, where inflamed/infected tracings streak down from the corners of the mouth, often pestering older adults. Local care is important for early relief –

but these patients need aggressive treatment of perioral/gingival yeast, as described above. Again, the terrain *not* the organism.

You might read about *Candida auris*, a recently discovered and very vicious microbe. This might present a serious global health threat, as it is often multi-drug resistant, difficult to identify, and has caused outbreaks in health care settings. Quite honestly, my approach is to treat all TYS patients appropriately, for as long as it takes to reduce their symptoms and to restore immune competency. My comprehensive program might be your best armor against emerging infections. Other yeast and fungal species can cause issues as well, but these are far less prominent than with *C. albicans* – and many of these might respond as well to aggressive treatment for TYS.

One last item is not inconsequential. Almost seven years ago, my Scottsdale, Arizona, friend, general physician and immunology researcher Stephen E. Fry, MS, MD, released a blood test detecting fungal and other parasitic genetic elements, biofilms, and erythrocytic bacteria (www.frylabs.com). Using sophisticated isolation techniques and data-processing algorithms to compare findings with the national nucleic acid sequence database, his report can show ("pan-protozoal metagenomics") internal infections not detected otherwise. Needing a descriptive name, I have termed this "Deep Blood Fungus" (DBF) to distinguish it from TYS. Since 2015, his studies have positively identified specific fungi (or other protozoa) found in the blood of patients suffering with a wide range of "inexplicable" diseases, such as…various cancers, blood cancers, severe skin conditions, sudden kidney failure, sudden worsening of diabetes, MS (multiple sclerosis), ALS (Lou Gehrig's disease), RA (rheumatoid arthritis), SLE (lupus), vague immune defense system disorders, and others, even fungus evidence in the plaque blocking heart arteries (our *leading* cause of death) and in other body organs.

You might want to review my two-hour lecture on youtube.com detailing my evaluations and clinical experience with several unusual disease presentations. (Deep Blood Fungus: Dental and Other Connections to Devastating Illnesses, Parts 1 and 2) What is worrisome is that DBF might be our first ominous glimpse of deeper parasitic pathology, far beyond our simplistic understanding of bacteria and yeast.

May the Peace of the Lord Be with You

We have reviewed extremely effective treatments for many disturbing discomforts – and I have barely scratched the surface. But I must share with you one final stratagem, to help your patients recover faster and better.

My lab director, when I was pre-med in the late 1960s and working in the immunology department at Stanford, was psychiatry professor George F. Solomon, MD. He was one of the first scientists to hypothesize that the relationship between brain activity and the immune system can be important for determining health and influencing the course of the disease and its outcome. Interestingly, Ayurveda dating back over 2,000 years had concepts of natural and acquired immunity, of psychophysiological response specificity, and beliefs that certain types of people, based on personality and somatotype, had greater resistance to disease. Canadian physician Sir William Osler, MDCM, created the first journal club, created the first residency for

specialty training, was the first to bring medical students out of the lecture hall to the bedside, was a founding member of the Association of American Physicians, and was instrumental in the creation of the Johns Hopkins School of Medicine. From this lofty vantage point, he is reputed to have said that it is as important to know what is going on in a man's head as in his chest, in order to predict the outcome of pulmonary tuberculosis.

Physicians long gave recognition to Hippocrates' observation that "The natural healing force within each one of us is the greatest force in getting well." But understanding the profound significance of that concept would wait until 1964, when Solomon coined the term "psychoneuroimmunology." Research now aims to uncover the mechanisms by which the brain is able to influence the functions of the immune system. You might realize that we now call this "mind-body medicine," exploring behavioral and biological mechanisms that link psychosocial factors, health, and disease.[20]

Recall that patients suffering with The Yeast Syndrome, desperately seeking professional help for years while watching their symptoms multiply and escalate without needed relief, these people suffer enormous stress and anxiety. Chronic stress through "wear and tear" ravages the immune system, induces chronic activation and altered health outcomes that resemble those seen in chronic inflammatory diseases. Altered immune function can lead to exacerbated symptoms of both physical *and* psychological illnesses. Studies have suggested that stress might "cause" autoimmune disease because of a higher incidence in those previously diagnosed with stress-related issues.

Solomon later confirmed that stress, hostility, and depression impact the immune system[21]:

Many conditions such as heart disease, osteoporosis, arthritis, delayed wound healing, and premature aging, are related to stress and negative emotions….

Many doctors have noted that a patient's desire to get well is related to the outcome of a disease….

In particular, older adults are one obvious at-risk group because there are reliable age-related decrements in immunity.[21]

While these observations are critical to achieve early results and long-term improvement, few physicians assist their patients with "stress" management.

One resource I have found valuable for 45 years is the first book by Herbert Benson, MD, *The Relaxation Response.* A Harvard physiologist, he studied transcendental meditation then being popularized by "the Beatles guru," Maharishi Mahesh Yogi. His studies showed that every culture has some form of meditation, and he "took the mysticism" out of the technique. His instructions are simple and often effective.[22] Otherwise, patients can seek formal training from a Transcendental Meditation Center (www.tmhome.com). I wrote a delightful article on stress for *Rotarian Magazine*, republished in 19 languages.[23]

As a strong believer in spiritual centering, I encourage most of my patients to try an easy and personal approach to reading Proverbs in a very special way. I have them select each day a phrase or verse that resonates with them right then, write it on a 3 x 5 card, and refer to it four times that day. Each day they select a new phrase and on Sunday they review all seven from the week and then start anew. At the end of the month, they review all 30 – and then begin again. I have seen remarkable calming and tranquility emerge, which encourages not only their compliance with treatment but also their improvements across the entire symptom spectrum of TYS.

Dr. Solomon went on to examine the relationship between spirituality and religiousness and important health outcomes, specifically studying people living with HIV. Using the four factors of the Ironson-Woods Spirituality/Religiousness (SR) Index (Sense of Peace, Faith in God, Religious Behavior, and Compassionate View of Others), they found *each* subscale was significantly related to long survival with AIDS. Long survival was also significantly related to both frequency of prayer (positively) and judgmental attitude (negatively). Their study documented strong and significant correlations with less distress, more hope, social support, health behaviors, helping others, lower cortisol levels and altruistic behavior as mediators of the relation between SR and long survival.[24]

End of the Line – But Not End of Your Rope!

Thank you for joining me on an expedition that has formed a central part of my practice for almost 40 years. This exploration has, of necessity, been severely limited but I have labored to share the most important concepts, within their historical context. Treating patients is the most honorable profession, one that blesses those that give and those that receive. Each has a compassionate duty, one to share fully and truthfully, the other to assess and advise with best effort. As a practitioner of any kind seeing "yeast" patients, your obligation is to seek to understand the pathophysiology and the bases of effective treatments … *and* to listen intently, to revise your diagnoses and instructions as needed to provide speedy results. I trust that my experience and efforts have given you assurance that helping many of those who present to you, who entrust their health and their future to your care, is well within your reach. For many years to come. Godspeed.

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John Parks Trowbridge, MD, 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, his exceptional experiences in medicine, surgery, and nutritional technologies encouraged him to ask provocative questions. His persistent curiosity in resolving perplexing issues has enabled him to find effective answers. Serving for years as a senior aviation medical examiner for the FAA, a "company doc" for 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, has lectured around the world, has produced dozens of hours of CDs and DVDs, and has authored many articles and several books, all sharing his unique perspectives. He and his devoted staff at Life Celebrating Health near Houston, Texas, continue to welcome those who insist on enjoying a healthier future: 1-800-FIX-PAIN, www.healthCHOICESnow.com.