Dethroning the orthodoxies: Ideas it may be time to throw out

“Follow the science” they say. But if Covid has awakened us to anything, it’s that science is dynamic, a work in progress. Today’s verities may be overturned by new discoveries. What follow are some dogmas that are past their expiration dates:

The “Blue Zones”: These enclaves of longevity are based on a romantic fallacy: That there exist remote outposts of well-being, shielded from the ravages of modern civilization. Traditional diets, pristine environments, abundant exercise, and social support into old age produce an inordinate crop of super-agers.

This idea is not new: Think Shangri-La, a fictional kingdom in Tibet described in the 1933 novel *Lost Horizon* by English author James Hilton, made famous in a classic 1937 movie directed by Frank Capra.

It’s a picturesque notion, a projection of popular distrust of the corrupting influences of modern lifestyles. According to the BlueZones.org website:

“The term ‘blue zones’ was first coined by Blue Zones founder Dan Buettner, a National Geographic Explorer and Fellow and journalist, during an exploratory project he led in 2004. After an expedition to Okinawa, Japan in 2000 to investigate the longevity there, he set out to explore other regions of the world with reportedly high longevity. With the support of National Geographic, Buettner, and

his team of scientists and demographers traveled the world in search of communities where people not only lived longer but also enjoyed a high quality of life in their old age."

Buettner and his team identified five Blue Zones: Sardinia, Italy; the islands of Okinawa, Japan; Nicoya Peninsula in Costa Rica; Ikaria, Greece; and Loma Linda, California.

The Blue Zones project has spawned a slew of best-selling books including *The Blue Zones*, *The Blue Zones Solution*, *The Blue Zones Challenge*, and *Blue Zones Secrets*. There's even a cookbook, *The Blue Zones American Kitchen*.

Blue Zones®□ is now trademarked as an LLC, and is expanding into developing planned wellness communities across the U.S.

I can't claim credit for this revelation, but there are holes in the Blue Zones mythos. A review entitled "Supercentenarian and remarkable age records exhibit patterns indicative of clerical errors and pension fraud" was written by Oxford University Professor of Demographic Science Saul Justin Newman. He makes some interesting points:

- Paradoxically, with the exception of Loma Linda California, the places dubbed Blue Zones score *highest* relative to their nations' averages for poverty, illiteracy, infectious disease prevalence, crime, administrative disorganization, but *lowest* in life expectancy.
- Birth records are extremely unreliable in some of these regions, especially in the late 19th and early 20th centuries, from where many accounts of super-agers originate. Some may be attributed to poor record keeping; others to outright fraud, when people deliberately alter their credentials for one reason or another.

- Even Loma Linda's claim to fame as a place where average lifespan is 10 years greater than the average for the U.S. at large is disputed by data from the CDC that shows its inhabitants don't outlive their American peers.

An article in Slate—"Do Blue Zones Really Exist?"—provides additional perspective:

"The proponents of Blue Zones claim that such areas have very low consumption of meat and processed foods—but Okinawans lead the nation in consumption of Spam, and have the highest concentration of KFC restaurants of any area of Japan."

It's laudable that Blue Zones is inspiring efforts to enhance our diets and lifestyles—but there's more wishful thinking than hard science underlying the concept. What began with benign intentions has been monetized and fashioned into a commercial juggernaut. So very American!

"Risky" testosterone: The shibboleths have been falling. First was the notion that testosterone is a culprit in heart disease. After all, it's men who usually get heart disease decades before women catch up. Must be that evil testosterone!

Hence, when men with low testosterone were prescribed testosterone replacement they were warned of heightened cardiovascular risk. This dissuaded many men from accessing a life-changing intervention; doctors, concerned over liability, shied

away from prescribing T.

In a resounding vindication of testosterone replacement therapy, a 2023 study in the *New England Journal of Medicine* found that men—even those at high risk for heart attacks—suffered no adverse consequences when taking testosterone gel.

But not so fast. It's long been alleged that testosterone "feeds" prostate cancer. In fact, one of the strategies used to treat advanced prostate cancer is to obliterate men's testosterone with "androgen deprivation" drugs. So, doesn't it make sense that giving a man testosterone could cause cancer to develop, or cause the small cancers that lurk in older men's prostates to go into overdrive? Under that premise, many men preferred to stay weak, unmotivated, sexless and flabby rather than court death.

That dogma has been overturned, ushering in a new era of receptivity to testosterone replacement. A 2023 study in JAMA Network Open found that giving men testosterone *did not* hike their risk for prostate cancer.

But what about men with elevated PSAs? I've always been cautious of monitoring PSAs carefully in the men for whom I prescribe testosterone replacement. I don't prescribe T when their baseline PSAs are high, and if they go up during therapy, I quickly stop it, and make a referral to a urologist for a thorough workup to rule out prostate cancer. It was "standard of care" to exercise caution. By the latest standards, I was, perhaps, unduly risk-averse.

The new trend among top academic urologists is to keep men on testosterone, *even if they're suffering from low-grade prostate cancer*—the "Watch and Wait" kind with a low Gleason score. And after prostatectomy, as long as PSAs remain low, they believe that testosterone replacement can be safely reinstated.

Dr. Wayne Hellstrom, a prominent urologist, states in a recent article in *Urology Times*:

"'About 20 years ago, when I gave a course at the American Urological Association [AUA] and would ask if anybody in the audience would give testosterone to a man who had prostate cancer, 3 of maybe 300 to 400 urologists would put up their hands. Now, probably 75% to 80% of urologists will give testosterone to men in these circumstances,' he observed. Until the past decade or so, he added, urologists were afraid of giving testosterone to men with any kind of prostate cancer for fear of 'fueling the fire'."

This is truly a revolution in men's health care, comparable to the turnaround that's happening around hormone replacement therapy for women; once shunned due to fears of increased heart disease and breast cancer risk, HRT is experiencing a renaissance as its safety is validated by new studies.

Fiber fervor: "Do your stools float?" That's the provocative question posed by Dr. Denis Burkitt in 1969. A British general surgeon, he grew tired of resecting large intestines for colitis, diverticulitis and cancer, and took sabbatical to travel to Uganda to discover why the populace was spared Western GI maladies.

Burkitt's conclusion: Indigenous people consumed massive amounts of fiber, many-fold the amounts eaten by inhabitants of modern industrialized nations. He advanced the "Fiber Hypothesis", and suddenly Westerners were imbued with fiber fervor.

Full disclosure: My stools rarely float (Is that TMI?). Nor should they, according to experts. Movements should be well-formed and sink to the bottom of the bowl. If

they float, it may be a sign that there are undigested food particles, trapped gas from excessive fermentation of carbohydrates, or alternatively, fat residues indicative of exocrine pancreatic insufficiency (EPI).

While natural soluble fibers from fruits and vegetables promote normal intestinal transit, and act as prebiotics to foster a healthy microbiome, yielding beneficial short chain fatty acids, there can be too much of a good thing. We have now learned to limit some of these in sufferers of gas, bloating and diarrhea who are diagnosed with small intestine bacterial overgrowth (SIBO); they're advised to try a low FODMAP diet to minimize difficult-to-digest carbohydrates.

Low-carb and even keto or carnivore diets may provide relief for sufferers of certain digestive maladies. They may have inadvertently done themselves in by obeying the imperative to virtuously devour massive amounts of fiber—the downside of Dr. Burkitt's legacy.

Dr. Burkitt was right about the benefits of traditional diets. But the resulting fiber fervor ignores the inconvenient truth that other indigenous people who enjoy freedom from Western GI maladies subsist on diets virtually bereft of fiber, like the Masai of Africa and the Arctic Inuit. It may be that too much animal protein, per se, is not the culprit in the Western Diet; it's all the accompanying refined carbohydrates, sugar, industrial seed oils, and chemicalized food additives that are doing us in.

A recent trial highlighted the fiber fallacy; in subjects initially diagnosed with polyps, four years of a of a low-fat, high-fiber, high-fruit, and -vegetable diet had *no impact* on the recurrence of colon polyps eight years later.

When it comes to fiber, results may vary. Fiber recommendations shouldn't be one-size-fits-all. Don't feel unvirtuous if you can't tolerate an arbitrary fiber quotient that's based on outmoded science.