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SODA, DEATH AND TAXES

With treatment of chronic disease eating up health-care budgets, elected officials consider excise taxes to reduce consumption of harmful sugary beverages.

BY BRITTNEY SALINE

On Nov. 4, 2014, 76 percent of voters made Berkeley, California, the first U.S. city to pass a soda tax.

The **tax** is to be paid by distributors and is set at **1 cent per fluid ounce** of sugar-sweetened beverages. The tax also applies to the sweeteners—such as syrup—used to produce those beverages, with the calculation based on largest possible production volume. Milk products, natural juices and baby formula are exempt.

After its implementation in March, the tax generated just shy of **US\$700,000** in revenue in its first six months, and **\$250,000** is earmarked for the Berkeley Unified School District's cooking and gardening program, which lost **\$1.9 million** in federal grant money in 2013.

Berkeley City Councilmember Laurie Capitelli helped spearhead the measure. At first, he saw the tax as little more than a revenue source. Then he saw a **YouTube presentation** by Dr. Robert Lustig, pediatric endocrinologist at the University of California-San Francisco.

In his 2013 book “Fat Chance: Beating the Odds Against Sugar, Processed Food and Obesity,” Lustig discussed findings from his 2013 **study** on the relationship between sugar and diabetes prevalence across 154 countries over a 10-year period, during which worldwide diabetes prevalence rose from 5.5 to 7 percent.

“Every additional 150 calories per person per day barely raised diabetes prevalence,” Lustig wrote. “But if those 150 calories were instead from a can of soda, increase in diabetes prevalence rose sevenfold.”

Soda, energy drinks and sports drinks account for **36 percent** of added-sugar intake in Americans, according to the United States Department of Agriculture.

“The science is in, I believe, and so I pivoted from looking for sources of revenue to looking for ways to, in fact, reduce consumption of what I consider to be a toxic substance,” Capitelli said.

As Americans get sicker—rates of both **obesity** and **metabolic syndrome** are pushing 35 percent in adults—Berkeley's landmark legislation leaves the rest of the country wondering: Could taxes reverse the trend?

Dollars Over Diabetes

Berkeley's tax—still known by the campaign name Measure D—is an excise tax. Unlike sales taxes paid by the consumer at the register, excise taxes are assessed before the point of purchase. The expectation is that distributors will increase prices for retailers, who then increase shelf price.

Colloquially referred to as “sin taxes” by some, excise taxes serve two purposes: raising revenue and discouraging consumption of harmful substances such as tobacco and alcohol.

Since 1969, cigarettes have been subject to **excise taxes** in all 50 U.S. states and the District of Columbia. In 2009, a federal tobacco tax increase raised the price of cigarettes by 22 percent, resulting in **3 million** fewer smokers just two years later, according to Dr. William C. Roberts, executive director of the Baylor Heart and Vascular Institute. The hike generated more than \$30 billion in three years, **USA Today** reported. Advocates for excise taxes on sugary drinks—such as the **Institute of Medicine**, the **International Diabetes Foundation** and the **British Medical Association**—hope for similar results. But more often than not, the soda industry impedes efforts, with lobbying groups backed by the American Beverage Association (ABA) spewing millions of dollars in the direction of lawmakers.

In 2009, for example, the ABA spent \$19 million on lobbying efforts compared to the \$700,000 it spent the year before, New York University professor Marion Nestle reported in “Soda Politics.” The Coca-Cola Co. and PepsiCo Inc. inflated their spending by several million as well, bringing total industry lobbying for 2009 to \$38 million.

“Why the sharp increase?” Nestle wrote. “Congress was considering a tax on sodas. The lobbying funds were well spent: Congress soon gave up on that idea.”

Specifically, Congress was considering a soda tax to help fund **health care**. The ABA pushed back, arguing taxes wouldn't reduce consumption.

Sometimes money is as much about saving face as deflecting regulation. In 2010, Philadelphia Mayor Michael Nutter **proposed** a 2-cent-per-ounce sweetened-beverage tax, with \$20 million of its projected annual revenue designated for nutrition and exercise programs. One year later, The Children's Hospital of Philadelphia was **\$10 million richer**, thanks to the

American Beverage Foundation for a Healthier America. Nutter tried a second time and failed, and **Phillymag.com** detailed the significant pressure lobbyists placed on elected officials when fighting the measure.

By August 2015, total soda-industry lobbying expenditures since 2009 had grown to almost \$106 million, according to the **Center for Science in the Public Interest**. Meanwhile, **proposals** for sugary-beverage taxes fell flat nationally and in 22 U.S. cities, states or districts—even in places such as Telluride, Colorado, a historic mining town with a population of just over 2,000.

“No city contemplating a soda tax is too small or too poor to be the target of a massive and lavishly funded counteroffensive,” Nestle wrote.

The Great Debate

A significant portion of Big Soda's lobbying fund is dedicated to spoon-feeding the public the soda industry's arguments against beverage taxes—primarily that they are regressive toward the poor and an instrument of the “nanny state,” a term used to describe government policies perceived as overprotective.

Lustig dismissed the arguments.

“(Type 2) diabetes is a regressive disease because it affects the poor more,” he said in a July interview with the CrossFit Journal.

A 2011 **analysis** in the International Journal of Epidemiology suggested a 40 percent greater incidence of Type 2 diabetes in low-income groups.

Besides, Lustig argued, we already live in a nanny state—and it's not the government that's doing the nannying.

“Unless you grow it yourself, you have only the access the food industry supplies to you...Ninety percent of the food produced in the United States is sold to you by a total of ten conglomerates,” he wrote in “Fat Chance.” The Coca-Cola Co. and PepsiCo Inc. are among the 10.

“You've already been told what to drink,” Lustig said over the phone. “They say, ‘Get the government out of my kitchen.’ I don't want the government in my kitchen either unless there's a more dangerous force already there, which is what we have.”



Dr. Robert Lustig

UCSF Medical Center

Furthermore, government intervention often directly benefits the soda industry. For example, corn subsidies keep the price of high-fructose corn syrup low, giving soda producers access to cheap sweeteners.

“I don't want the government in my kitchen either unless there's a more dangerous force already there, which is what we have.”

—Dr. Robert Lustig



Marian Mabel

The beverage industry didn't go down quietly in Berkeley, but 76 percent of voters were unwayed by the campaign against Measure D.

Opponents of taxes also argue that diet-related illnesses are solely a matter of personal responsibility. But it's not that simple, according to John Cawley, an economics professor at Cornell University.

"The fact that someone's being really sedentary and consuming a lot of calories, that isn't just a private decision they're making," Cawley said. "It also has consequences for everybody else because we pay higher taxes to fund Medicaid (and) we pay higher health-insurance premiums."

In a chapter appearing in "Food and Addiction: A Comprehensive Handbook," Cawley reported that of the \$85.7 billion spent on obesity-related medical costs in the U.S. in 2006, "\$19.7 billion was paid by Medicare, \$8.0 billion was paid by Medicaid, and \$49.4 billion was paid by private sources such as health insurance. The costs covered by Medicare and Medicaid are ultimately paid by taxpayers."

A 2012 [study](#) estimating the effects of a penny-per-ounce tax on sugar-sweetened beverages took the math a bit further. The authors predicted that between 2010 and 2020, \$82 billion in medical costs would be "attributable to excess sugar-

sweetened beverage consumption," which the authors define as one beverage per week.

According to the [Centers for Disease Control and Prevention](#), 86 percent of U.S. health-care costs relate to treating chronic disease; in 2013, taxpayers spent [\\$1.1 trillion](#) on these conditions.

The numbers, Cawley said, justify government action.

"Economics recognizes a rationale for government intervention ... when there are market failures, which occur when the operation of private free markets fails to maximize social welfare," he wrote. "One market failure relevant for obesity is external costs: obese individuals do not bear the full cost of their condition."

The Resistance

Despite the costs, the soda industry remains committed to its fight against regulation, even paying community members—via public-relations agencies—to oppose the taxes, Nestle reported.



Courtesy of Xavier Morales

In Berkeley, proponents of Measure D worked at the grassroots level to combat a Big Soda assault that cost millions.

"This strategy permitted soda companies to appear as though they had nothing to do with promoting opposition to the tax and that actions against it instead arose spontaneously from the community," she wrote.

Berkeley was no exception, with ABA lobbying expenses exceeding [\\$2.4 million](#).

So how did Measure D supporters, with their budget of approximately \$300,000, defeat Big Soda? By pursuing a general tax instead of a specific tax and filling the cracks with community education.

According to California law, specific taxes must pass with a two-thirds majority vote, while general taxes require only a simple majority (at the same time as Measure D passed, San Francisco's 2014 specific soda-tax proposal [failed](#) despite a 55 percent majority vote). The catch is that revenue from general taxes goes into the city's general fund, where it might or might not be spent on health initiatives.

The risk was calculated, Capitelli said.

"We ultimately chose a general tax because we were fearful that there was going to be a tsunami of money, which in fact did pan out, from the soda industry," he said.

To ease Berkeley voters' fear that the revenue might be squandered on potholes, campaign leaders established a [panel](#) of experts with backgrounds in nutrition, education or health care to advise the city council on where the revenue should go.

"The way we won this was basically just block by block, house to house, neighbor to neighbor."

—Xavier Morales



John Cawley



Laurie Capitelli

For Xavier Morales, executive director of the Latino Coalition for a Healthy California and a Measure D advocate, the proposal's success was all about education: canvassing the community and preparing residents for the soda industry's arguments in the months before the vote.

"The (soda industry's) subtle messaging is 'these are white people trying to tell you brown and black people what to drink,'" Morales said.

"It was an all-out ground war," he added. "We didn't win this by matching what they were trying to do with their money. The way we won this was basically just block by block, house to house, neighbor to neighbor."

Bandage or Cure?

It's one thing for a sugary-beverage tax to pass; it's another for it to reduce consumption.

With no U.S. precedent to study, researchers look to nations such as Finland, Hungary, France and Mexico, where sugar-sweetened-beverage taxes have cropped up beginning in 2011. Because these policies are so recent, little data is yet available to illustrate the effect of the tax on consumption.

Still, researchers from Banque de France **found** that six months after the implementation of France's sugary-beverage tax, set at 11 euro cents (12 cents) per 1.5 liters, the price of the tax was fully passed through to consumers, suggesting that a decrease in consumption would likely follow as consumers react to higher prices. And before Ireland repealed its decades-old soft-drink tax due to European Union tax-rate-harmonization efforts and decreasing revenue, researchers **found** an 11 percent decrease in consumption for each 10 percent increase in price.

Mexico's results are the most promising. Eleven months after the 1-peso-per-liter tax (about 7 cents per liter) was implemented in January 2014, a preliminary study detailed a 12 percent drop in soda sales, with the largest declines seen in

low-income communities, the New York Times **reported**. And in a rare display of loyalty to health over industry, the Mexican Senate in October **dismissed** a **proposal** by the Chamber of Deputies to give a 50 percent tax cut to drinks containing less than 5 grams of sugar per 100 milliliters.

It's still too early to tell how these changes might affect health, but many researchers have used simulation and modeling studies to predict possible outcomes.

One 2015 **study** predicted that a national excise tax of 1 cent per ounce on sugar-sweetened beverages in the U.S. would prevent 576,000 cases of childhood obesity over a 10-year period. Another **study** estimated that a similar measure would prevent 2.4 million diabetes person-years, 95,000 coronary heart events, 8,000 strokes and 26,000 premature deaths, all the while saving more than \$17 billion in medical costs. The effects were calculated even while assuming that 40 percent of calories saved from reducing soda intake would be compensated for with other calorie-dense foods.

Though the effects of beverage taxes are largely unknown, that hasn't stopped health advocates across the world from calling for them. A Russian lawmaker recently **proposed** a 15-ruble-per-liter (21 cent) tax on soda. In November, the Wall Street Journal **reported** that Indonesia is considering a tax on drinks with added sugar, and in July, the British Medical Association **called** for a 20 percent tax on sugar-sweetened beverages in Britain. Politico **reports** that soda taxes may be on the table in as many as 12 U.S. cities in 2016—including another attempt in **San Francisco**.

In November, Connecticut lawmaker Rosa DeLauro **proposed** a federal soda tax, something Cawley said might be more effective than city or statewide taxes due to the problem of cross-border shopping. Soda lovers in small jurisdictions can simply hop the border to get a cheaper fix. This was the case in Denmark, which **repealed** its soda tax of eight decades after losing revenue to surrounding countries in Europe. The size of the United States would make shopping outside the country far less likely if a national tax were in place, while shopping in another city or state wouldn't be out of the question if only some taxed soda.

"It definitely merits federal intervention," Cawley said.

Fate of the Future

As for Berkeley, the numbers are trickling in, with preliminary **findings** showing the tax has been fully passed on to retail prices in chain supermarkets and gas stations. Meanwhile, Morales focuses on educating the Berkeley community about the dangers of sugar-sweetened beverages and earmarking tax revenue for that purpose.

"For me, success is us lowering the rates of diabetes and other chronic diseases, and the way we do that is through nutrition education, through opportunities for greater physical activity, more infrastructure for tap water, and farm-to-table community gardening," he said.

Morales paused, reflecting on the wildfires that prompted California Governor Jerry Brown to **declare** a state of emergency in September.

"I really feel for the people who have been affected, but you know, about 20,000 people were displaced, and we're calling states of emergency on something like that," he said. "At what point are we going to start calling a state of emergency for diabetes?" ■

ABOUT THE AUTHOR

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THE

CrossFit

KITCHEN



CREAMY SHRIMP ZUCCHINI

By Nick Massie

Overview

This recipe from Nick Massie of [PaleoNick.com](http://paleonick.com) will give you the satisfaction of a pasta dish—with a better balance of protein and carbs. Wild shrimp and Italian sausage are mixed with zucchini and squash noodles in a Thai-inspired sauce, then topped with sprigs of fresh basil.

Ingredients

- 16 oz. wild shrimp, peeled, deveined and sliced in half
- 3 oz. Italian sausage
- 2 c. tomato puree
- 1 c. light coconut milk
- 3 zucchini, rinsed and cut into noodle-like strips
- 3 yellow squashes, rinsed and cut into noodle-like strips
- 1 oz. basil chiffonade, saving two basil leaves for garnish
- 7 cloves garlic, smashed and minced
- Olive oil, as needed
- Kosher salt, to taste
- Black pepper, to taste

Directions:

1. Heat a cast-iron skillet over medium-high heat.
2. Add 1 tsp. of olive oil and all the garlic to the pan. Cook until the outer edges of garlic become golden brown.
3. Reduce the heat to medium-low and add the sausage to the pan, breaking it into small chunks.
4. Stir garlic and sausage together, add the zucchini and yellow squash, and fold all ingredients together. Turn heat to medium-high and continue to cook for 3-4 minutes.
5. Add the tomato puree and coconut milk and stir to incorporate. Bring to a simmer, fold in the shrimp and cook for 60 seconds.
6. Cut the heat, taste the sauce, and adjust seasoning to your liking using kosher salt and black pepper.
7. Transfer to a plate, garnish with basil leaves and enjoy!
8. You can also portion this out and refrigerate for up to 5 days or freeze for up to 6 months.

WHEN THE SKIP HITS THE FAN

Try changing your perspective to connect with athletes who are struggling with a movement.



MIKE WARKENTIN | UNCOMMON SENSE | MARCH 2016

“Do something different. Take off one shoe. Try chewing gum. Maybe lose your underwear for the next set. Or put on a second pair.

“Just do something different.

“Anything.”

Coaching can be exasperating at times, and tough situations sometimes push trainers to their wit’s end and beyond.

For every athlete who learns the false grip and starts crushing sets of muscle-ups 30 seconds later, there are 50 who require dozens of cues, hundreds of attempts and months of struggling before they finally earn a view from atop the rings. Other athletes fight with movements for years, some utterly baffled even long after they’ve acquired far more than the requisite strength.

When an athlete shows little or no improvement for a lengthy period, coaches are forced to play the long game, never knowing which sledgehammer strike will split the stone. Good coaches swing relentlessly from different angles, using everything from the most precise verbal, visual and tactile cues to abstract, “Star Wars”-style advice in the vein of “try so hard, you should not.” But even the very best of us can reach a point where we silently decide a particularly challenging client will never accomplish his or her goal.

At that point, I think you need to hit the reset button.



As CrossFit coaches, many of us can perform all the CrossFit skills. Perhaps we can't snatch 300 lb. or do 50 unbroken handstand push-ups, but we can snatch reasonably well, we can pump out good numbers of handstand push-ups, and the arsenal is full of pistols, bar muscle-ups and so on.

In some cases, these skills came easily, and in other cases they were acquired over time through hard practice. Either way, it's almost inevitable that the master eventually loses the perspective of the student and becomes a poorer coach for it.

So become a student again. When you reach a point of utter frustration as a coach, stop being a coach for an hour or two.

Having trouble teaching an uncoordinated athlete to do double-unders? Try triple-unders yourself. Spend 60 minutes straight whipping your legs raw just to reacquaint yourself with the frustration your athlete is feeling.

Tasting frustration will alter your perspective and recharge your empathy.

If triple-unders come easy, try quads. Got bar muscle-ups? Try doing them strict. Great at handstand push-ups? Try free-standing for reps. Mastered everything in the gym? Try sketching the "Mona Lisa" or playing "Eruption" by Van Halen.

Feel overwhelmed, confused and baffled for a while. The purpose is to get frustrated enough that you feel exactly like your client does when the rope snaps him in the ass for the 2,000th time. Tasting that frustration on the other side will alter your perspective and recharge your empathy, allowing you to coach with more patience and creativity.

If you've ever felt interest in a client waning due to a lack of progress, I'd suggest you're ready to start teaching double-unders again only after you've failed at triple-unders and thrown the rope into the ceiling fan a few times.

At that point, you'll understand exactly where your athlete is at, and you might find you're actually the reason she's stuck there. ■

About the Author

Mike Warkentin is managing editor of the CrossFit Journal and founder of [CrossFit 204](#).



Who knew functional movements could be so therapeutic?



CrossFitJOURNAL

DO IT TILL YOU'RE DEAD

Feel free to ignore health warnings. You have every right to do so. BY JOSH BUNCH, CF-L3



Jim Bunch died at 58 with a pack of Marlboro Reds beside his bed. He was 58.

On a godforsaken hill in Vietnam, machine-gun fire cut the jungle's silence to pieces. A mine exploded. Tracer rounds punctured the sky like deadly lightning bugs, and green Army helmets pushed on.

Charlie started this fight, but the U.S. Army was going to finish it.

My dad, the slickest private in this man's Army, kept his trademark cool, fired without looking, notched the stock of his rifle—one more dead Viet Cong—and took a satisfying drag on a cigarette that was as much a part of his face as his blue eyes or fighter's nose. Pleased like an 18-year-old boy who just nailed the prom queen, he shut his eyes and exhaled a small smoke ring. In the distance, mortars exploded and the brave battled the oppressors.

Shooting. Fighting. Killing. Smoking. Singlehandedly winning a war through coolness.

OK, so dad didn't tell the story quite like that, but I prefer fanciful embellishments to boring facts any day: jungle hot, bugs the size of Volkswagens and rain thick as syrup. Dad would correct when I got to talking about his fighting days.

"Cigarettes," he'd say, "that's about the only thing you ever get right."

Do as I Say, Not as I Do

I caught dad smoking weed when I was 8. At the time I didn't know what it was. It took a friend's party seven years later to make it all come rushing back: Dad smoked more than just cigarettes.

“ When you thought of Jim Bunch, you smelled smoke and coughed a little. ”

He drank a lot, too, did a mess of drugs for a while and hopped from woman to woman the way a hobo hops trains. All vices he outgrew, tired of or was forced to quit for one reason or another.

Except cigarettes. When you thought of Jim Bunch, you smelled smoke and coughed a little.

He died in 2011, taken peacefully while he slept. That's what the obituary said anyway. If I'd had it my way, he would have gone down swinging like the hero every boy imagines his father to be.

From a 3-foot nightstand beside his twin bed, I took a pocket-knife, left the digital alarm clock and overflowing ashtray, and threw away an unopened pack of Marlboro Reds. He was 58 years old, one of eight siblings to make the ripe old age of almost-a-senior-citizen. All smokers.

"Don't piss in the wind," he used to say.

"Don't fuck with Jim Bunch," he always added.

"Don't smoke. If you do, I'll beat your ass."

When I turned 16 he added, "Don't get her pregnant."

Proudly, I followed my dad's rules to the letter.

His era was tough, full of stubbornness, staunch morals and will. When he quit a 20-year love affair with Southern Comfort, he did it cold turkey. That's just what you did back then; if you wanted to get something done, you manned the hell up and did it. It's an archaic attitude that barely lives on in the survivors of a generation forgotten.

Too bad he never got so resolute about smoking. It was part of him, he said, when he failed at another half-assed attempt to quit—something his entire family did before they knew it was dangerous.

By the end he couldn't make it from his mechanical blue chair to the mailbox without a rest—or a puff.

"The next cigarette might kill you," doctors said.

"Let it," he would reply.



Coca-Cola open happiness

USA
PROUD PARTNER

Big Soda's marketing has made outlandish images commonplace and obscured the true effects of sugar on health and wellness.

iStockphoto.com/Lisa-Blue



Jim Bunch served in Vietnam. He survived the war but not addiction.

Too Little too Late

Addiction wasn't a thing when my dad was 15 years old and started smoking.

When the war ended, he came home and fought a different fight. Instead of bayonets and bullets he battled nicotine and tar. It was a war he never stopped fighting.

Back in 1965, warning labels were new, having just appeared after Congress passed the Federal Cigarette Labeling and Advertising Act. The labels didn't carry the same weight they do today.

Americans were trusting then, the Internet was many years away, and we hadn't been shit on and lied to for decades by every media source on the planet. Smoking was culture, complete with

tight jeans, pocket T-shirts and motorcycles. Not something for movie villains and foreigners only—something for everyone.

Along with an entire generation, my dad ignored the warnings and assumed everyone was overreacting.

He was wrong.

“ The goal was truth, not elimination. Let Americans smoke all they want, but make sure they know what they're getting into. ”

When members of my dad's generation finally discovered the truth about smoking, they acted.

In 1970, another law came into effect: Warning labels got more aggressive, and Big Tobacco was forbidden to advertise on TV or radio.

They didn't make cigarettes illegal, and they didn't burn Big Tobacco like so many banned books. They wanted honesty: Tell consumers your shit hurts.

Full disclosure was the first and most valuable step in the war for health. The second and more complicated step was changing the culture. And eventually they did.

The goal was truth, not elimination. Let Americans smoke all they want, but make sure they know what they're getting into, free from pretty packaging and superstar spokesmen.

Big Tobacco is still here today, plugging along one drag at a time, and if anyone wants to light up, he or she is free to do so.

Exactly as it should be.

Changing of the Guard

A century ago no one—least of all The Coca-Cola Co.—could predict where we'd be as a nation today: dialysis centers on every corner, rampant heart disease and more children with Type 2 diabetes than ever.

It was 1892 when Coca-Cola incorporated and started sending bottled sugar rattling off to stores, and, as painful as it sounds, we just didn't know any better.

Things are different now.

Like nicotine, sugar is addictive and linked to a host of health concerns. Yet the branding behind it is born of focus groups and behavioral studies and full of triggers that make our mouths water every time we see a can of soda.

If that wasn't enough, celebrity endorsers beguile us and pseudo-science obscures the truth. Big Soda knows how to peddle its products, and the global industry is measured in billions of dollars.

That's where CrossFit and affiliate owners like me come in. It's our duty as fitness professionals to educate, free from the tyrannical behavior and manipulated science of Big Soda and its supporters.

CrushBigSoda.com, a CrossFit-born initiative, isn't trying to make Coke illegal or institute Pop Prohibition. We want the same thing my dad's generation wanted all those years ago: full disclosure. A culture change.

“ If we really believe in fitness and freedom of choice for all, then it's our responsibility as CrossFitters to champion this fight and crush Big Soda. ”

Instead of Big Soda's paying select scientists to ignore nutrition and say “exercise is medicine,” we want studies that prove sugary beverages are hazardous to health, and we want warning labels that share the message with the people who need to hear it loud and clear.

We want to coach humans and make them fitter, exposing the dangers of sugar-filled drinks and foods along the way.

Instead of jingles, gimmicks and advertisements aimed at kids, we want honesty, science and freedom to make real choices.

If we really believe in fitness and freedom of choice for all, then it's our responsibility as CrossFitters to champion this fight and crush Big Soda.

War, dad said, is good for two things: scars and stories. Even when you've had your fill of both, he said, you fight anyway. So fight for those who can't or just don't know, fight for full disclosure, and fight for a culture change we desperately need. ■

About the Author

Josh Bunch, CCFT, opened Practice CrossFit in 2007. He coaches by day and writes fitness and fiction by night. He can be found at PracticeCrossFit.com, Games.CrossFit.com or anywhere that needs a stiff shot of CrossFit.

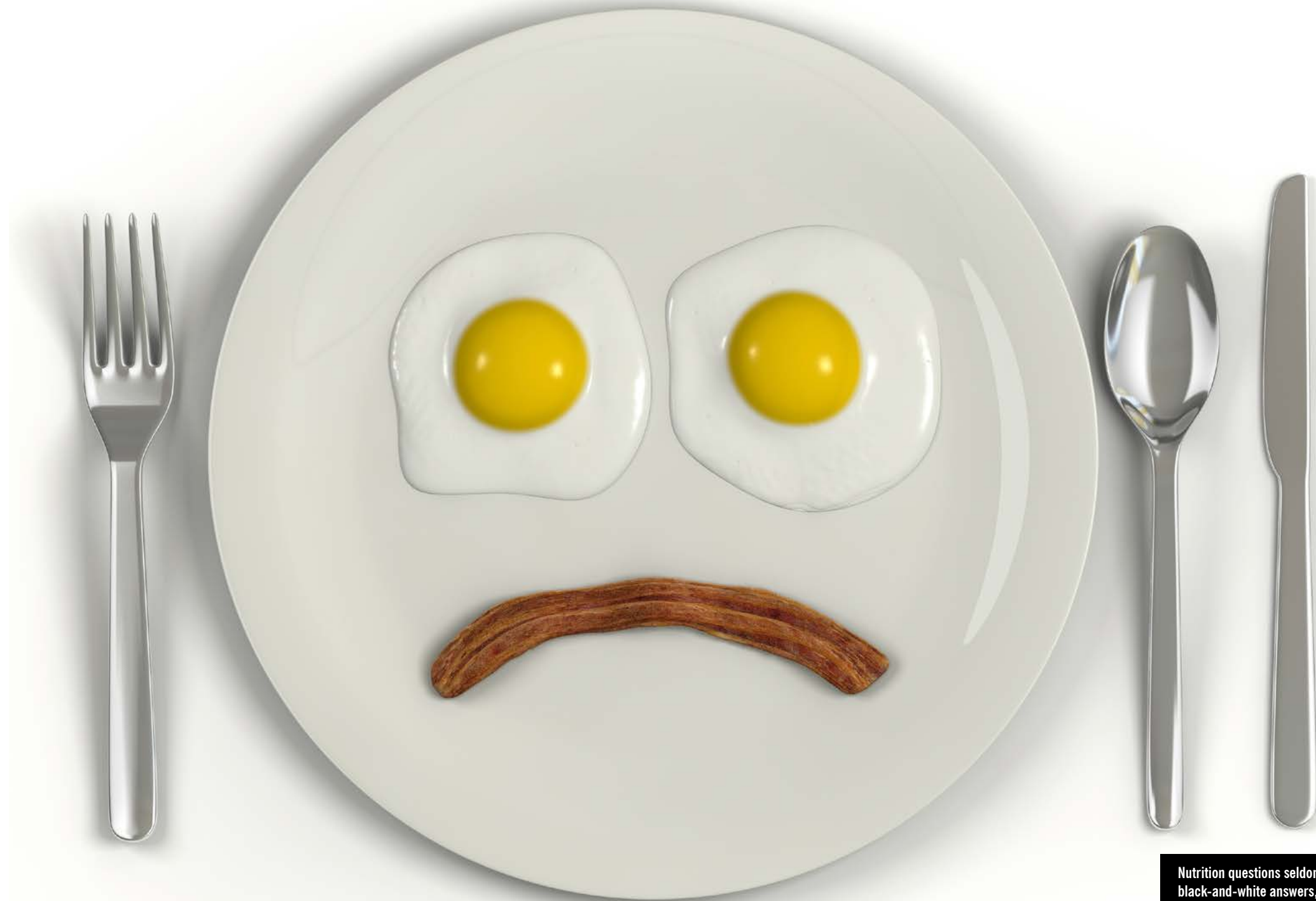
THE **CrossFit** JOURNAL

WITH A GRAIN OF SALT

Sponsored “science” and constantly changing nutrition guidelines force people to carefully evaluate what they put in their bodies.

BY ANDRÉA MARIA CECIL





Nutrition questions seldom have black-and-white answers, leaving many people confused. The best approach involves tracking intake and evaluating the results, then optimizing your diet.

Nutrition is complicated.

Many scientific studies either proclaim a particular food will kill you or help you live to be 300 years old, said Harvey Levenstein, professor emeritus of history at McMaster University in Ontario, Canada.

“It starts with some kind of a warning and it sounds like it’s very, very certain, but then by the time you get to the third or fourth sentence, then the ‘may’ becomes the operative word ... but people don’t read it that way. They just read the headline: ‘X Food Will Kill You, Say the Experts.’”

Take, for example, Time magazine, a weekly publication that reported a circulation of more than 3 million in 2013.

In March 1984, the magazine’s cover featured a paper plate with two sunny-side-up eggs for eyes and a slice of bacon as a frown. “Cholesterol” was in bold, yellow letters; below, the words “And Now the Bad News ...” appeared. Thirty years later, a curled shaving of butter appeared on Time’s cover beneath the headline “Eat Butter. Scientists Labeled Fat the Enemy. Why They Were Wrong.”

In the span of three decades, the magazine had characterized saturated fat as both villain and savior.

Such labels are problematic, said Jean-Marc Schwarz, a professor and researcher in the College of Osteopathic Medicine at Touro University in California.

“Science is much more nuanced than black and white,” he explained. “People want one list for foods to eat and another for what not to eat. And it’s just more complicated than that.”

There Is No List

Banning foods from your diet leads to disordered eating habits, said Brian St. Pierre, director of performance nutrition at Canada-based nutrition-coaching company Precision Nutrition.

“Eating one slice of pie or even eating something high in trans fat one time is not going to make or break anything,” he said. “One meal out of 28 is a small portion of your intake, and it’s just one piece of the meal. It’s not like you’re eating the whole pie.”

St. Pierre added: “It’s the things you do consistently that ultimately determine your health, your body composition or your performance.”

Almost every food, if consumed in excess, can lead to negative effects, Schwarz noted.

“Water is toxic if you drink a lot of it,” he said, referencing hyponatremia, a condition in which a person’s lungs and brain become flooded from drinking too much fluid. “If you drink a lot of water, you can kill yourself.”

The same can be said for cyanide. The poison is found in such small amounts in cherry pits and apple seeds that eating the fruits in typical quantities poses no real threat. Eat about 20 apples—seeds included—in one sitting, however, and the results could be deadly.

Dietary fat is no different. While fat doesn’t make you fat, over-eating anything will. Plus, there is no one thing called “dietary fat.” There are seven types of dietary fat; some are good, some are not so good.

“So a low-carb diet is a very, very good diet in the long term, but if you’re on a super high-fat diet, it’s not necessarily a good thing,” explained Dr. Richard Johnson, professor of renal diseases and hypertension at the University of Colorado-Denver’s Anschutz Medical Campus in Aurora.

“Depends on what kind of fat. ... Not all fats are equal.”

For that matter, not all carbs are created equal either, added Johnson, author of “The Fat Switch.”

“Vegetables have a lot of carbohydrate but are really very healthy. But pasta and bread may not be as healthy.”

It’s enough to cause analysis paralysis.

“Overall, everyone wants to avoid death and illness,” Levenstein noted.

And food is the medicine that can delay or prevent both.

“It’s gone haywire over the past decades because you’ve got a whole series of people with interest in convincing you that certain foods are either good or bad for you,” continued Levenstein, author of “Fear of Food: A History of Why We Worry About What We Eat.”

“On one hand you have all the food producers who’ve latched onto the notion that you can use these scientific studies that supposedly show that their food is good for you ... but I guess you can start with the people who produce the scientific studies, who have an interest in their professions, who want research grants and so forth, who come to ... firm conclusions about the relationship between food and health.”

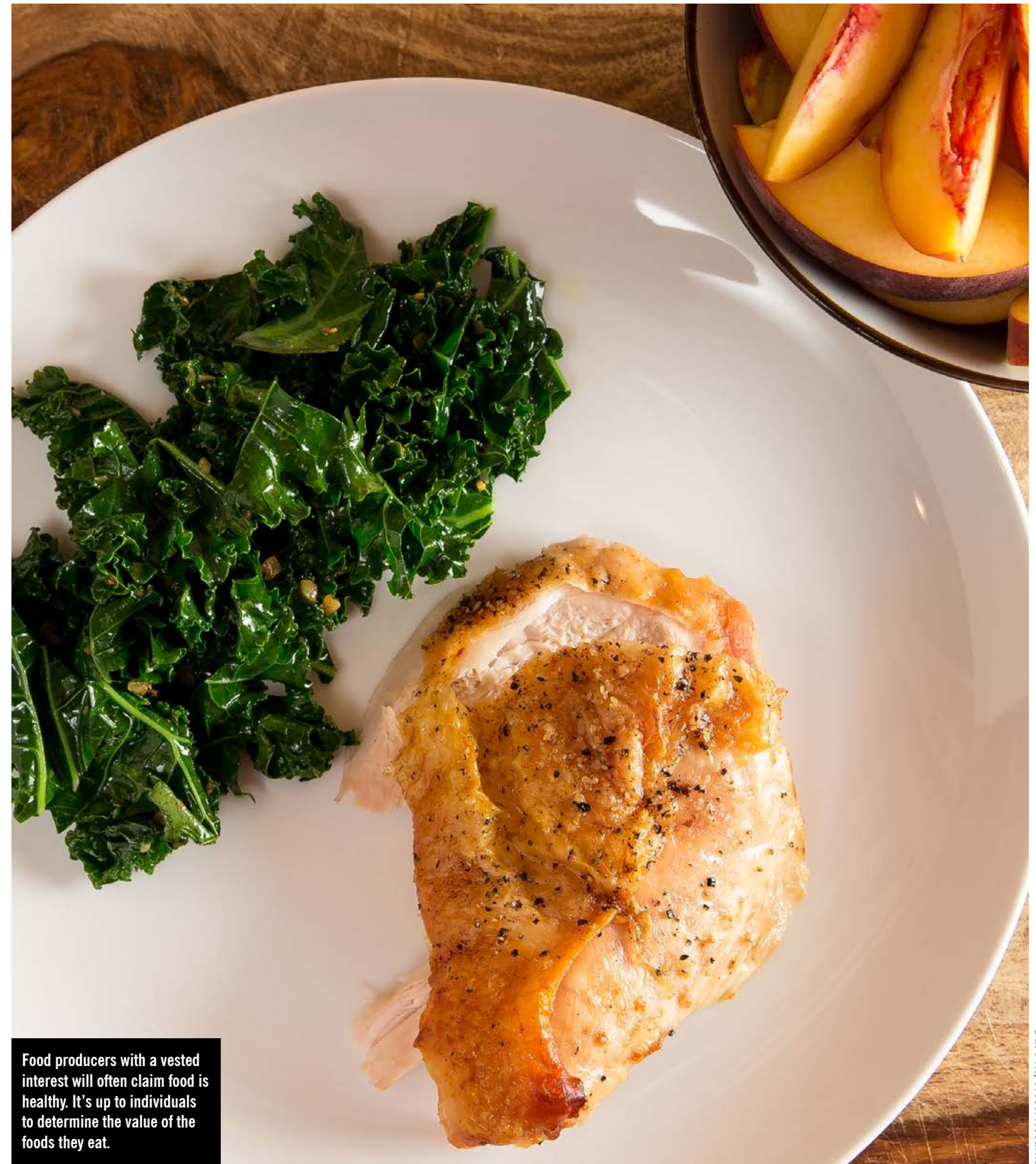
CrossFit’s advice: Track the numbers. Just like you collect data on workouts, collect data on diet. If a particular food doesn’t improve health and performance, eliminate it.

Levenstein’s advice: Be skeptical.

“The things they told you are bad for you in the past now are good for you, and it’s going to continue like this,” he said. “We’re always going to be bombarded by people ... trying to scare us into buying their things or following their advice. There’s too much money to be made ... for it to stop.” ■

About the Author

Andréa Maria Cecil is assistant managing editor and head writer of the CrossFit Journal.



Food producers with a vested interest will often claim food is healthy. It’s up to individuals to determine the value of the foods they eat.

Dave Re/CrossFit Journal

PREScribe WHAT TO WHOM—AND WHY?

Russell Berger attends Exercise Is Medicine credential workshop and discovers gaping holes in methodology.

BY RUSSELL BERGER

We needed to know more, so on Feb. 20, Russ Greene and I attended the two-day EIM credential workshop in Atlanta, Georgia—which is also home to the headquarters of Coca-Cola.

Credentials and Licensure



But there was one important point I wasn't hearing. The ACSM wants the EIM credential to be legally required for anyone who wants to receive clients in this way. While the organization has backed away from attempts to license and regulate all trainers, the ACSM "does support licensure" for those who "work with patients and clients with medical conditions that require minimal to advanced clinical support."

From what I could tell, the success of the EIM scheme relies completely on the success of trainer licensure.

From what I could tell, the success of the EIM scheme relies completely on the success of trainer licensure. After all, if anyone—regardless of experience or credential—was allowed to train unhealthy populations, why would someone attend the EIM workshop? Did it offer some valuable methodology or information that would give trainers an edge in the battle against chronic disease? Not from what I could tell.

But before I could raise this question, Hutber explained how EIM sees its value to trainers.

“The health-care industry doesn’t trust us,” he began. “If you were a doctor, would you send your patient to someone who was certified in a weekend?”

Hutber immediately answered his own question: “It doesn’t matter, because they won’t.”

Hutber went on to explain that the EIM program was designed to meet the requests of the health-care industry itself. Without the EIM credential, doctors, insurers and health-care providers would have no “quality assurance” of exercise professionals.

The irony of Hutber’s comment seemed lost on the audience and Hutber himself. The EIM credential workshop, after all, is a weekend course. If attendees pass the test at the end of the second day, they are qualified by EIM to work with unhealthy populations.

But there was a more serious problem with Hutber’s view. On one hand, Hutber was saying the EIM credential is necessary because the public and health-care industry distrust “unqualified trainers.” On the other hand, Dick Cotton, the ACSM’s national director of certification, was intimately involved in publishing the infamous “[CHAMP paper](#).” The “Consortium for Health and Military Performance and American College of Sports Medicine Consensus Paper on Extreme Conditioning Programs in Military Personnel” raised alarm about the potential danger of CrossFit and other fitness programs not accredited by the National Commission for Certifying Agencies (NCCA).

The effect of the CHAMP paper on CrossFit’s reputation is almost impossible to estimate. The fear-mongering the CHAMP paper promoted was echoed by dozens of academic papers and hundreds of news outlets. In other words, the public fear of unqualified trainers is owed to the efforts of CrossFit’s competitors in the fitness industry—the ACSM leadership included.

After lunch, I had an opportunity to speak with Hutber privately, and he very explicitly assured me that the ACSM does not promote or support legislation that would make the EIM credential a legal requirement for working with unhealthy populations. I pulled out my phone and opened the ACSM position statement that claimed exactly the opposite. Hutber looked deeply concerned as he read his own organization’s words, which contradicted what he was telling me.

“I’ll have to check with Dick Cotton on this,” he told me.

I walked away with the impression that Hutber legitimately did not know his own organization supports legislation that would make the EIM credential a legal requirement for working with unhealthy clients. I recalled Hutber’s words: “Health care doesn’t trust us.”

If by “us” Hutber was referring to the ACSM, maybe health care is wise not to extend its trust.

Setting the issue of trainer regulation aside, I realized there were a number of important questions the EIM workshop had yet to address. Specifically, I wanted to know what methodology EIM was teaching its trainers to employ. What movements, nutritional prescriptions and metrics did this methodology comprise? Without this information, I had no way of predicting the efficacy of EIM’s effort to combat chronic disease.

By the end of the next PowerPoint presentation, I had the answers to these questions.

Concise Questions, Vague Answers

Lobelo began the next presentation with a claim: Traditional corporate wellness programs don’t work because they fail to change participant behavior. The solution was to train EIM credential holders in “behavioral-modification strategies.” For the next four hours (not counting lunch and coffee breaks), we learned about “communication styles” and were exhorted to employ “motivational interviewing” that uses “thoughtful interview and support” to create “positive behavior changes” in clients.



Is exercise really medicine?

As a CrossFit trainer, I have personally experienced the difficulty of trying to get an unhealthy friend or family member to come try a workout. Yet once this initial hurdle is overcome, the person is generally hooked for life. It was unusual to hear so much discussion about the difficulty in getting people to consistently show up for training. Was this a critique of EIM’s own methodology? After all, who would want to stick with a fitness program that offered little to no quantifiable results?

As Lobelo continued on in a seemingly endless string of behavior-change jargon, the question kept nagging me: What behavior changes? Finally, I heard something that sounded like an answer. Lobelo’s “behavior change” was to get at-risk populations to follow the national Physical Activity Guidelines—specifically, 150 minutes of moderate-intensity physical activity per week.

That was it. The EIM exercise prescription for combating our nation’s chronic-disease epidemic was 150 minutes of “moderate-intensity physical activity” per week. I was at a loss for words. Sure, this type of generic advice isn’t wrong,

That was it. The EIM exercise prescription for combating our nation’s chronic-disease epidemic was 150 minutes of “moderate-intensity physical activity” per week.

but it’s also a phenomenal underestimation of what a professional trainer is capable of doing for his or her clients. Does the ACSM not recognize the enormous range between an effective fitness program and an ineffective fitness program? What would possess it to completely ignore the type of activity trainers were using and focus only on the quantity?

I raised my hand. “How should we quantify success? What metrics should we use to determine that our program is working?”

The answer was complicated and confusing, and the question was battled between all three EIM presenters before they were finished. Their response boiled down to something like this: The goal of the EIM trainer is to get people to show up to the gym and be “active,” so how you do that really doesn’t matter. EIM trainers should not concern themselves with measuring fitness or health improvements because it’s impossible to guarantee someone will get fitter or improve his health metrics by following your program, as these things are determined by genetics.

In other words, the EIM presenters all assumed that measurable improvements to performance or health metrics were an elusive and mysterious phenomena, and when a fitness program failed to deliver these results, it was the client’s fault, not the trainer’s.

This problem was compounded by the fact that the presenters had no quantifiable definition of “fitness” and no consistent measure for “intensity.” When I asked the presenters how they quantified fitness, the answer was summarized as “VO₂ max, sometimes.” When Greene asked the presenters how they measure intensity, the answer was “heart rate or perceived exertion.”

The latter presents a significant problem. Without a standardized definition of moderate intensity and a way to measure it, tracking “moderate-intensity activity” is meaningless. Imagine a doctor prescribing a “moderate” dose of acetaminophen to a patient but having no way to quantify that dose. EIM trainers, clients and doctors have no accurate or precise way to decide what counts as moderate-intensity activity and what doesn’t.

I had been suspending my judgment of the EIM program’s methodology only to find out the methodology doesn’t exist. EIM reduces trainers to their lowest common denominator: activity babysitters. What EIM trainers would offer doctors is nothing more than the assurance that patients were spending time off the couch—something that guarantees a small statistical reduction in the risk of developing chronic disease. This is, of course, better than nothing, but as I’ve already noted, the ambiguity of focusing only on “activity” vastly underestimates the positive benefit a trainer can have if she is armed with the right technology.

As it turns out, this underestimation may be by design.

Next, I asked Lobelo if the EIM workshop was going to address diet and nutrition. I referenced Dr. Robert Lustig, whose work shows sugar is the only type of food that predicts Type 2 diabetes prevalence independent of obesity and other confounders (such as sedentary behavior and alcohol use).

“So should we tell our clients to stop drinking soda?”

At my question, Lobelo became flustered. He explained that determining which nutritional prescriptions a trainer should utilize is impossible because “we still don’t know what a healthy diet is.”

But I had not asked Lobelo about the existence of an ideal “healthy diet.” I asked him if we should tell clients with chronic disease to stop drinking soda. Behind me, a female ACSM trainer gave me her own answer: “That’s outside of your scope of practice.” I turned to Lobelo: “Is that EIM’s position as well, that nutritional recommendations are outside of a trainer’s scope of practice?” His answer, which was far from direct, indicated that it was.

I raised my hand again.

“Is your view on nutrition at all influenced by the fact that your department at Emory University has received over 2 million dollars from Coca-Cola?”



Becoming more active is a start, but it’s not enough. Precise, measurable fitness programs implemented by competent trainers can dramatically improve health.

The room was suddenly full of mumbling and shuffling sounds. Lobelo was ready with an answer: “I didn’t personally take any money from Coca-Cola.”

Again, Lobelo seemed to be answering questions he wished I was asking, not the questions I was actually asking. I continued, “But your department has received over 2 million from Coke, correct?” Lobelo avoided a direct answer to this question and simply denied that Coca-Cola’s money had influenced his views. He quickly transitioned back into his PowerPoint slides and seemed to avoid looking toward my side of the room for the rest of his presentation.

But this was not Lobelo’s only bizarre claim regarding nutrition. In his closing remarks, he said something even more discouraging. He insisted that nutritional recommendations for clients

simply don’t work: “Diet-specific behavior change typically doesn’t work. It goes against nature.” In other words, Lobelo’s advice is to focus only on exercise because it’s too hard to get clients to stop consuming refined sugar.

Something was deeply wrong. Here was a man who had just lectured for four hours on the power of behavior change yet was telling trainers not to bother trying to change the nutritional habits of clients.

Don’t Talk Diet

During the next break, I noticed Hutber standing in the back of the room near the hotel-provided coffee station. By this point I had recovered from the initial culture shock of being

told we shouldn’t advise clients to abstain from consuming refined sugars, but I needed to know how the ACSM justified this position. I approached Hutber and asked. He admitted the importance of nutrition in combating chronic disease and suggested trainers could make “general food-pyramid recommendations” based on United States Department of Agriculture (USDA) guidelines. Anything more specific, he said, was breaking the law.

I asked him what trainers should do when registered nutrition experts are giving bad advice—advice that in many cases is slowly killing their clients.

“Should we do what presents the least potential liability or should we do what is ethically right?”

A small group of participants began forming around us. Hutber considered my question and seemed to concede that this was a problem.

“What if the ACSM joined CrossFit in combating the licensure and regulation of nutrition and dietary advice?” I asked Hutber.

In the group around us, a few heads nodded in agreement.

“If you did we could easily fix this problem of nutritionists’ and dietitians’ trying to prevent us from giving life-saving advice to our clients.”

Hutber nodded quietly, almost somberly. He likely did not miss the irony of my proposing that the pro-licensure ACSM work to remove legal barriers for trainers.

DAY 2

Agree to Disagree

During our second day at the workshop, the majority of presentations were on the topic of “Chronic Diseases and Prescriptions.” These were lead by Jim Skinner, chair of the EIM International Advisory Committee. Skinner taught that one of the EIM program’s key recommendations is to segment group training by type of chronic disease. For example, trainers should not have patients with heart disease in the same group class as those who have Type 2 diabetes. The rationale for this is that different populations need distinctly different types of training, an archaic assumption Skinner supported by systematically walking through a number of chronic conditions and discussing the relevant precautions, methods of assessment and exercise recommendations for each.

Many of these precautions and considerations were very sensible. For example, a trainer working with an obese client may need to reconsider what postural changes are included in training (supination and pronation), as they might be too difficult for the client without assistance. Yet Skinner’s lecture failed to deliver anything that looked like effective or meaningful exercise recommendations. I attributed this to the aforementioned ACSM failure to define fitness or intensity in any consistent or scientifically quantifiable way.

But Skinner said something else in his presentation that caught my attention. He noted the existence of a number of health recommendations “we can all agree on.” These three recommendations were, “Do not smoke, eat less fat and fewer calories, and exercise.”

In support of this supposed consensus, Skinner cited the American Heart Association, the American Cancer Society and the American Diabetes Association. I was fairly surprised to see the promotion of the nearly extinct low-fat diet. I also mentally noted that each of the organizations Skinner cited has suckled at the teat of Big Soda, receiving over \$2 million collectively from The Coca-Cola Co.

After the workshop, I was able to check Skinner’s citations and found they were completely false. Since 2013, the Amer-

ican Diabetes Association has placed no limitation on total fat intake, while it has recommended the limitation of elimination of sugar-sweetened beverages. Similarly, the American Cancer Society does not recommend an overall limitation of dietary fat but does suggest limitation of “sugar-sweetened beverages such as soft drinks.” What about the American Heart Association? It recommends limitation of “saturated fat, trans fat, sodium, red meat, sweets and sugar-sweetened beverages.”

To make matters worse, Skinner’s recommendation to limit fat consumption doesn’t conform to current USDA guidelines—the same guidelines to which the ACSM expects trainers to limit their nutritional recommendations. In January, the USDA shifted its stance on sugar dramatically, putting limits on daily



The energy-balance myth would have clients believe both choices are OK as long as you work off the calories. In reality, refined sugar is far worse for the body.

“It seems to me that you’re so obviously avoiding discussion of sugar consumption that it’s becoming awkward. Is that because EIM was co-founded by Coca-Cola?”

—Russell Berger

intake that would require the average American to cut his or her sugar intake by half.

At this point, Greene raised his hand and asked Skinner a very specific question: “If we have a client with Type 2 diabetes and he comes into the gym with a Powerade, should we address that?”

For anyone who understands the relationship between sugar consumption and diabetes (or anyone simply following the nutritional guidelines of the organizations Skinner had already cited), the answer would be a resounding “yes.” Our aim was to see if Skinner would fall into this camp, and if so, how he would justify EIM’s hostility toward trainers giving sugar-related nutritional advice.

But Skinner had a different answer: “The body needs carbohydrate,” he said. “If they are exercising, they are using it. So it’s not a problem.”

Skinner’s answer indicated that he holds to a theory known as “energy balance”—the view that all calories, regardless of type or source, have an equivalent effect on health. Thus, metabolic derangement and chronic disease could not be caused by consumption of refined sugar but by simply consuming more calories than you expend. Until last year, this theory was championed by an organization called the Global Energy Balance Network (GEBN), another partnership between the ACSM and Coca-Cola. The GEBN collapsed and died in the midst of public embarrassment when The New York Times published internal emails exposing the organization as a scientific front designed to protect Coca-Cola sales.

The pattern here was obvious. I raised my hand again and for a second time asked a question: “It seems to me that you’re so obviously avoiding discussion of sugar consumption that it’s becoming awkward. Is that because EIM was co-founded by Coca-Cola?”

Skinner was ready with his answer: “No.”

I pointed out that the ACSM’s current president, Larry Armstrong, says funding does affect objectivity in research.

“Do you disagree with your organization’s president?” I asked him.

The participants around me erupted, some in moans of frustration, others in laughter. There was enough noise to drown out a portion of Skinner’s answer, but I caught the gist of it. He said he disagreed with a lot of people in his organization but insisted that Big Soda’s founding and funding of the EIM program had nothing to do with his systematic avoidance of the topic of sugar.

SWEET DECEIT?

On the drive home from the workshop, I was left to ruminate on Skinner’s false citations, outdated nutritional advice and complete avoidance of the topic of refined sugar; Lobelo’s doubting that we can identify that sugar is harmful, as well as his absurd advice to avoid trying to change client nutritional behaviors; and Hutber’s repeated pleas to avoid giving “illegal” dietary advice to clients. There was only one rational explanation for this behavior: The Coca-Cola money paying these men’s salaries.

Attending the credential workshop confirmed our view of the EIM scheme. In many ways, it is the perfect investment for Coca-Cola, a brand that has suffered greatly from declining soda sales and a growing body of scientific evidence that sugar is directly linked to some, if not all, chronic disease.

This can be seen clearly in the ACSM’s and EIM’s positions on nutrition. The EIM scheme is not simply agnostic on sugar; it is downright hostile to the suggestion that trainers should talk to clients about food. Within five days of my attending the EIM workshop, the ACSM issued the revised position statement “[Nutrition and Athletic Performance](#).” The revisions emphasized the ACSM’s view that “athletes should be referred to a registered dietitian/nutritionist for a personalized nutrition plan.” The revisions do not mention the word “sugar” once.

The EIM scheme is not simply agnostic on sugar; it is downright hostile to the suggestion that trainers should talk to clients about food.

Even if trainers were left without guidance on how to approach nutrition, many could accidentally stumble onto a diet that reduced sugar intake and improved client health. This won’t happen if EIM representatives frighten trainers into thinking they will be sued for telling a client to stop drinking soda.

By my estimation, the legal risk for trainers giving general dietary advice is virtually non-existent, especially with recommendations as simple as “don’t drink soda.” Of the tens of thousands of CrossFit trainers operating in the U.S., not a single one has ever been sued for making nutritional recommendations to his or her clients. In 2012, North Carolina blogger [Steve Cooksey](#) sued the state’s Board of Dietetics/Nutrition after the board accused him of “providing nutrition care services without a license.” Cooksey had published an



article describing how with the Paleo Diet and to do the same. The dropped when the North new guidelines allowing dietary advice without a license.

he beat his diabetes encouraged others lawsuit was eventually Carolina board adopted people to give ordinary

The EIM’s position on liability also seemed to be highly selective. While they were willing to repeatedly warn about nutrition recommendations, the EIM workshop ended with a presentation by DOJ Global Vice President Michael McBrayer, who demonstrated a number of joint-stabilizing braces produced by his company. The EIM presenters (Hutber in particular) then encouraged trainers to tell their clients to use therapeutic aids to address pain or injury. If telling clients not to consume refined sugar is a job best left to licensed nutritionists, why is the recommendation of orthopedic braces not best left to licensed physical therapists? The EIM staff’s inconsistency showed just how frivolous their concerns really were.

Recalling Coca-Cola’s founding influence on EIM helped make sense of its position on fitness. In CrossFit, the effectiveness

of a diet is measured directly by its impact on fitness. The diet that doesn’t lend to increased work capacity across broad time and modal domains isn’t worth following. EIM encourages trainers not to improve fitness but to “increase client activity.” By instructing trainer’s to avoid measuring quantifiable fitness or health metrics, any chance of a trainer’s broaching the subject of nutrition through the back door of performance is eliminated.

It’s worth noting that many of those in the EIM audience shared my concern and skepticism about Coca-Cola’s founding of the program. After all, the audience comprised fitness trainers, doctors and health-care workers—people who are generally drawn to their career out of a desire to improve the lives of others. After speaking at length with a number of them, it became clear to me that the ACSM’s lack of transparency was the real problem.

Few of them knew of the collapse of the GEBN or Coca-Cola’s founding relationship to the EIM program. Yet it is these trainers themselves who could be most harmed by the EIM scheme, which neuters the professional trainer of any influence he or she might have in altering the nutrition of unhealthy clients. If it is successful, the ACSM, acting as Big Soda’s puppet, would become the gatekeeper for those desiring to train the chronically ill. Meanwhile, Coca-Cola improves its image, obfuscates the relationship between sugar and chronic disease, and protects soda sales. As a fitness trainer myself, I can imagine nothing more concerning.

During one exchange with EIM presenters on the role of nutrition in preventing chronic disease, a participant interjected: “Our job is to focus on just the exercise.”

Remember, that’s exactly what Coca-Cola wants you to think. ■

About the Author: Raised in Atlanta, Georgia, Russell Berger spent four years in 1st Ranger Battalion. After leaving the military in 2008, he opened CrossFit Huntsville, where he spent three years as head trainer. He now works full time for CrossFit Inc.



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A DEFT DOSE OF VOLUME

More isn't always better: James Hobart explains how certain experienced athletes can add training volume to increase work capacity.

BY JAMES HOBART, CF-L3

CrossFit programming thrives upon intensity, not volume.

This focus on intensity is a cornerstone of the CrossFit Level 1 and Level 2 curricula, and it is also one of the reasons many like CrossFit: fitness in an hour or less. Intensity is also a foundational piece of CrossFit Founder and CEO Greg Glassman’s “World-Class Fitness in 100 Words”: “Keep workouts short and intense.”

For years we’ve trusted in and consistently witnessed the benefits of less-is-more high-intensity workouts. Any affiliate owner will tell you athletes of all ages and abilities reap fitness benefits from 60 minutes of training that include a warm-up, one workout and a cool-down.

Glassman has also said, “Be impressed by intensity, not volume,” and, “Past one hour, more is not better.”

If all that’s true, why do we see so many athletes adding training volume to gain a competitive edge, and how do they do it appropriately to maximize fitness? We aren’t recommending more training volume, but we do believe some approaches are better than others when athletes are ready for additional work.

Volume: Problems and Solutions

The most common programming questions I receive as a CrossFit Seminar Staff coach and CrossFit Games competitor focus on training volume. Volume—particularly over the last few years—wiggled its way back into a programming methodology that is very effective without it. And this shouldn’t surprise us, as many perennial CrossFit Games competitors follow a regimen well beyond the standard three-days-on, one-day-off pattern seen on CrossFit.com and elsewhere.

It’s a fool’s errand to cram multiple workouts on top of each other in hopes of finding a shortcut to fitness.



Top crossFit athletes have the mechanics, consistency and training history that allow them to carefully increase workout volume.

Volume is alluring for many reasons. Some athletes who are trying to break into the upper echelons of Open and regional performance look to tack on extra volume in order to try and close the gap, and affiliates sometimes attempt to squeeze more and more into the relatively brief CrossFit class in order to follow suit. But don’t mistake volume for intensity and end up training for 90 minutes at 60 percent when 60 minutes at 90 percent might have been more valuable. Similarly, paying little attention to recovery is costly. It’s a fool’s errand to cram

multiple workouts on top of each other in hopes of finding a shortcut to fitness. Some strong-willed people just don’t know when enough is enough.

Athletes at the top of our sport who find benefit from extra training volume stand upon a nearly unshakable foundation of mechanics and consistency. They are thoroughly competent at linking these cornerstones with intensity. If you or your athletes require frequent scaling, extra workouts are not the solution.

Coaches, understand that every athlete will continue to improve with a single CrossFit workout per day. Volume is not the cure-all; effective coaching is.

Similarly, if you or your athletes struggle with mechanics, then once again volume isn’t the answer for you. Increased rehearsal of poor movement patterns and shoddy mechanics—more for more’s sake—is a loser’s gambit. You will just ingrain bad habits more frequently.

As a coach, you need to know what everyone trains for. The majority of athletes in an affiliate are training for life, and for them the occasional two-a-day might be fun, but training once a day four to five times a week will be enough. They won’t ever need more to obtain a lifetime of fitness. This is one of the most elegant mechanisms of CrossFit. Even those athletes chasing better scores in the Open or a competitive edge in a weekend competition will find effective preparation in a single session a day and focused skill work.

Athletes looking to take on more volume need to show up prepared, and this group is likely limited to competitors who rarely need to scale, can post competitive times on all workouts, and have no issues making mechanics and consistency corrections. The timeline to develop this type of foundation before adding volume is specific to every athlete. Some might reach this point in six months, others in a year. And for some athletes, it might take multiple years or never occur at all. Coaches, understand that every athlete will continue to improve with a single CrossFit workout per day. Volume is not the cure-all; effective coaching is.



2009 CrossFit Games champ Mikko Salo is known for his high training volume, but few can match his capacity.

Every year since I competed at the CrossFit Games in 2009, I take the fall off from higher-volume training. I'll jump in on local affiliate classes, hang out, go outside, and learn and play new sports. Sound familiar? Every year, I still see significant improvements during these periods. I experience personal bests with less volume. Because of this, as well as the concerns listed earlier, we need to realize that volume isn't necessarily a solution—it's a problem for three distinct reasons.

First, volume isn't necessary if the goal is simply getting fitter. In fact, it can be counterproductive or, worse, harmful when misapplied. This can't be said enough. Over the long term, every athlete would continue to improve work capacity across broad time and modal domains with a single daily dose of constantly varied functional movements executed at high intensity.

Second, intensity and effective variance must be maintained in order to maximize results as volume increases. Any aspect of fitness that we neglect to train with intensity will suffer, and extra volume simply cannot replace variance when training for general physical preparedness (GPP). That said, it can be very difficult to preserve variance and intensity with additional volume; doing so requires careful planning and preparation.



A lifetime of fitness is possible with just one workout a day.

Third, effectively implementing multiple workouts within the standard one-hour time frame common to CrossFit classes is difficult if not downright impractical. Not only is it difficult to manage a group during multiple workouts in a single hour, but doing so also significantly impedes the trainer's ability to cue, correct, improve, maximize safety and attend to athletes. Class



At regional CrossFit competitions, chippers are often paired with another workout before or after, giving athletes some ideas about how to train for such combinations.

management and cueing are important topics that warrant their own article, but they're worth mentioning here in the context of volume.

With all that in mind, volume can allow you to attack and improve more areas of your fitness if you are able to avoid simply going through the paces without intensity. Consider having the capacity to hit both a short, heavy workout and a longer, lighter workout in the same day. Variance and cautious volume allow us to continually improve multiple areas of fitness provided intensity is maintained. Volume combined with intensity will also wear you down, which provides a chance for athletes to train stamina and endurance and to learn to perform when they aren't at their best. This can be very important when training for multi-day, multi-event competitions.

These positives come at a cost. It will be much harder mentally and physically to maintain intensity as volume increases, and it is therefore very difficult to produce results and hit personal records. Extra volume also requires extra rest. Too much volume without ample recovery results in over-reaching or overtraining, which can push athletes back rather than drive them ahead.

A Theoretical Template for Adding Volume

Given that CrossFit so effectively addresses general health and fitness with one 60-minute session three to six times per week, it is usually only the competitive CrossFit athlete who considers additional volume. In some cases, general athletes will put in extra time to address a weakness, but it's more common for higher-level athletes to attempt to use volume to create success in competition. As such, CrossFit competitions can give us some clues as to how to successfully train with greater volume. The past isn't always prologue with regard to CrossFit competitions, but you need to know your history, and the last six years can offer some direction.



The CrossFit Games average about three events per day, and athletes can expect to be tested in time domains well above 20 minutes.

At all Levels

• Single-modality max-effort events (lifts or gymnastic efforts) are often tested shortly after another workout or later in the day after a singlet, couplet, triplet or chipper. This is very much in keeping with Glassman's advice to "blur the distinction between strength training and metabolic conditioning for the simple reason that nature's challenges are typically blind to the distinction."

• Variance remains critical, but the last five Open competitions tested around 16 different movements.

Regionals Level

• The CrossFit competition schedule is announced far ahead of time, and we often know how many days the Regionals and the Games will be—plan accordingly.

• The most common format is two events a day. The regional competition has featured three events per day approximately 25 percent of the time.

• The average number of regional events across three days is approximately six (about two sessions per day).

• Since 2010, single-modality tests, couplets and triplets for time show up more than anything else. Heavy weightlifting tests show up the least.

• On a two-event day, the most frequent combination since 2011 is chipper plus couplet/triplet/chipper (about 60 percent of the time).

• The second-most-frequent combination on a two-event day is single-modality effort plus couplet/triplet/chipper.

• Chippers range from six to 25 minutes and average about 19 minutes.

CrossFit Games Finals

• Since 2007, the average number of events per day is three.

• Since 2012, the Games spread approximately 13 events across five days, with at least one rest day.

• Single-modality events show up roughly twice as often at the Finals compared to any other scheme.

- Single-modality tests have included everything from a one-rep-max jerk to moving heavy sandbags to short sprints emphasizing agility.
- Events 20 minutes and longer are a staple, as are running, swimming and moving odd objects.

The body has limits, and coaches and athletes need to ensure ample rest and proper nutrition.

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8
Single session	Double session	Single session	OFF	Double session	Single session	Single session	OFF

Table 1: Two days with two workouts.

Based upon this information, how would you start adding volume to an athlete’s program? Let’s imagine we have an athlete who—barring injury—performs 99 percent of the programmed workouts as prescribed but only does one workout per day, including warm-up and cool-down. Begin with two two-a-day sessions per eight-day block, and consider the following cycle:

From Day 2 to Day 5, the athlete will complete five sessions—in the ballpark of the average number of events seen at regionals in recent years. Throughout this time, coaches must maintain a sharp watch over the athletes’ performance. First and foremost, coaches must ask if the athletes are maintaining a level of intensity equal to or beyond that exhibited before volume was added.

The goal is to incrementally increase volume until it replicates the physiological stresses of the regional or Games weekend (about six or seven events in three days). The table below shows how you can do that, with six workouts placed from Day 1 to Day 3. Once you’ve got that load in place, I recommend filling the rest of the week with single sessions, rest days and enough skill practice to ensure consistent technical improvement. Skill work, while technically challenging, is not meant to be for time or intensity and can easily be incorporated into warm-ups, cool-downs, or periods before, after or between strength or conditioning sessions.

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8
Double session	Single session	Triple session	OFF	Single session	Single session	Single session	OFF

Table 2: Increased volume over a three-day period to replicate volume of past regional competitions.

I also recommend varying where you place your single, double and triple sessions. Falling into the same pattern every week will not yield success, as one cannot predict the exact nature of a day of CrossFit competition.

What you program on each day is ultimately up to you, but paying attention to some of the trends and patterns listed above is useful. Always doing the same thing—often “strength and then a met-con”—will lead you astray, as there’s no guarantee competition will follow the same pattern, and athletes might be asked to lift heavy after a conditioning test.

Athletes and coaches also need to plan carefully. Trying to fit everything into a single hour can be difficult at times and impossible at others. If an athlete has the freedom, I recommend a workout plan that is similar to the structure and timing of a day of competition at the regional or Games level. In some cases, athletes might want to follow the probable timing of an upcoming local weekend competition. This, of course, highlights the need for competitive athletes to invest more than an hour a day—something that is neither required for general fitness nor an option for many busy athletes.



Shaun Cleary/CrossFit Journal



Author James Hobart (left) said a great training partner—such as Austin Malleolo (right)—will drive intensity way up and can delay the need for additional volume.

Recovery is also critical as volume increases. The body has limits, and coaches and athletes need to ensure ample rest and proper nutrition. Are athletes getting enough sleep? Are they eating enough to support performance but not excess body fat? Are they enjoying the process or are they starting to look cranky and worn out? Are intensity and performance being maintained or improving? Are athletes aggravating nagging injuries? Are athletes fresh when they enter the gym or are they experiencing unreasonable soreness related to a lack of recovery? Are athletes honestly communicating with themselves and their coaches or are they ignoring signs of over-reaching or overtraining? All of these questions are critical when increasing volume.

Other Critical Elements

Remember that programming and volume are just pieces of the puzzle. The magic is in the movements and the atmosphere. I've been extremely fortunate to train with some of the best CrossFit athletes over the last eight years, and I can attest to the truth of this statement from Glassman: "Men will die for points." Training partners make a world of difference, providing both camaraderie and motivation.

Before you play with volume, find someone you hate losing to. A rival becomes a powerful training tool who will push you to levels of intensity you'd avoid on your own. Some of my most painful workouts have come against one of my closest friends and greatest rivals, multi-year Games athlete Austin Malleolo. We often joke that we aren't going to train together anymore because it hurts too much.

"It's not what you do but who you do it with that matters," Malleolo has said.

He's also said, "I'd rip my bottom lip off if it meant winning."

You can't replace that level of competition with volume, though volume can amplify it when applied with a deft touch.

In closing, I want to return to intensity. Intensity is essential and it hurts, but it is required to greatly increase fitness. Volume is no substitute.

If you add volume and start producing results that are poorer than they would have been without volume, you need to retool your approach. Perhaps back off and start again. Volume can benefit you, but not at the cost of intensity and variance.

Chris Hinshaw works with some of our sport's best, including Games podium finishers Katrin Tanja Davidsdottir, Camille Leblanc-Bazinet, Rich Froning and Mathew Fraser. Once while working with Froning and CrossFit Mayhem Freedom, Hinshaw said there is little point to "adding on more running volume if you start to slow down Then you are just spending more time practicing running slow." Keep this principle in mind and consider how it applies to all areas of your training.

"You don't need harder workouts, you need to go harder in your workouts," Games veteran Tommy Hackenbruck quipped last year on Instagram.

Hackenbruck's advice echoes Glassman's foundational wisdom, which is worth repeating: "Be impressed with intensity, not volume."

Intensity and variance are the keys. Volume is secondary but can still produce results if implemented properly. ■

About the Author

James Hobart found CrossFit.com in 2007. While attending law school in 2010, he gained a position on CrossFit's Seminar Staff. In between then and now, James traveled to nearly every continent teaching new coaches at CrossFit's Level 1 and Level 2 seminars. He's competed at every CrossFit Games since 2009, and when he isn't working out he stays equally obsessed with Australian shepherds, any decent bowl of ramen and anything gravity propelled.



THE
CrossFit JOURNAL

FOR WHOM THE 'BELLS TOLL

BY ANDRÉA MARIA CECIL

CrossFit Founder Greg Glassman:

“Nobody’s doin’ enough with dumbbells.”



Not convinced dumbbells are a valuable training tool? Try Fran with dumbbells and get back to us.

It makes workouts both easier and harder, movements better and worse, and Fran times go down and up.

It is the dumbbell—the paradox of workout implements.

“(It’s) a different effect. There’s no wiggle room. You can’t be off balance. You gotta keep your head steady. You have to have pretty good form to do stuff with a dumbbell,” explained Jason David, owner of St. Clair Shores CrossFit, roughly 15 miles northeast of Detroit near the shores of Anchor Bay in Michigan.

Dumbbells are vastly underused in most CrossFit affiliates the world over, as recently noted by CrossFit Inc. Founder and CEO Greg Glassman.

“Nobody’s doin’ enough with dumbbells. They’re amazing, amazing tools,” he said in January.

And they’re “hyper friendly” for every CrossFit movement there is, Glassman noted, and yet have the power to make some exercises all the more horrible.

At CrossFit Escape in Queensland, Australia, coach Dylan Twiner uses a 6-kg dumbbell in place of an 8-kg barbell for a 60-year-old athlete with mobility limitations. With the dumbbell, she can handle the likes of front squats and push presses.

“Because it’s smaller, it’s a little bit easier to hold versus the barbell,” Twiner said.

But give a pair of, say, 25-lb. dumbbells to an intermediate or advanced athlete “and their Fran time goes up by 3 minutes,” noted Trevor Varwig, a coach at Straight Flush CrossFit in Las Vegas, Nevada.

Among the dumbbell’s benefits—striking fear into the hearts of many—is its ability to unmask imbalances.

“Each hand has to work independently and freely,” Twiner said. “There is more of a neurological response. ... You’ve got to think about both hands.”

And everyone has some sort of imbalance, noted Michael Rutherford, owner of CrossFit Kansas City in Kansas. Dumbbells appear in his gym’s programming at least once a week.

“We’re not bilaterally perfect,” Rutherford said.

At Straight Flush CrossFit, dumbbells appear in the months-old affiliate’s workouts at least once a week—despite athletes’ complaints.

At Straight Flush CrossFit, dumbbells also appear in the months-old affiliate’s workouts at least once a week—despite athletes’ complaints.

“There’s always moaning and groaning because they know it’s a little more difficult, but in the long run they see that it does make them better,” Varwig said.

Twiner likes to throw dumbbells into a vast majority of CrossFit Escape’s workouts as a way to disguise accessory work.

“If you put it in a workout they don’t realize it, but realistically it’s developing them.”

That development includes improved stabilization overhead, a deeper range of motion in exercises such as the bench press, better grip strength, and skill transfer to inverted movements that include the handstand push-up and handstand walk, “where both hands have to be strong,” Twiner said.

Dumbbells, Varwig noted, offer another form of variance.

“You can’t let yourself be complacent. With dumbbells, it’s a new challenge. It’s not the same old barbell that you’ve picked up 1,000 times before.”

And the instability athletes experience when working with dumbbells for the first time is “brain noise” they need to eliminate, Glassman said.

“You have to learn to not transmit that.”

About the Author

Andréa Maria Cecil is assistant managing editor and head writer of the CrossFit Journal.



THE
CrossFit JOURNAL

STRENGTH AND CONDITIONS

BY EMILY BEERS

The NCAA says its regulation of strength coaches is aimed at benefiting and protecting athletes. Others say the motives aren't so noble.

When the National Collegiate Athletic Association passed legislation in 2014 tightening requirements for Division 1 strength-and-conditioning coaches, it drew suspicion.

The regulation requires all Division 1 strength-and-conditioning coaches to hold a nationally accredited certification, citing athlete safety and a desire to meet athletes' performance needs as the impetus behind the rule change. But not just any nationally accredited certification is acceptable.

The NCAA wants the certification from one accrediting body in particular: the National Commission for Certifying Agencies (NCCA).

One of the certifications the NCCA recognizes is the Certified Strength and Conditioning Specialist credential offered by the National Strength and Conditioning Association (NSCA)—the same organization that, according to documents obtained by the CrossFit Journal, spearheaded efforts to institute the regulation that went into effect Aug. 1, 2015.

“This is a way for the NSCA to look good by saying, ‘All Division 1 strength-and-conditioning coaches have their CSCS,’ and it’s a way for the NCAA to say, ‘We care about athlete safety,’” said Colin Farrell, a strength-and-conditioning coach with the swim team at Marymount University, a Division 3 school in Arlington, Virginia. He also works part time as a CrossFit coach at Potomac CrossFit in Arlington.

He added: “Instead of (the NSCA) upping their game and providing a better service ... they have tried to regulate themselves into relevance to (increase) their revenue.”

“Instead of (the NSCA) upping their game and providing a better service ... they have tried to regulate themselves into relevance to (increase) their revenue.”
—Colin Farrell

While the NCCA’s website lists 16 personal-trainer and strength-and-conditioning-coach certifications under the banner “fitness and wellness,” the CSCS is the safest bet for aspiring strength-and-conditioning coaches to pursue, as any Division 1 school will automatically accept it, said John Parsons, director of the NCAA Sport Science Institute.

The only other credentials Parsons named as a safe option were the Collegiate Strength and Conditioning Coaches Association’s (CSCCA) Strength and Conditioning Coach Certified (SCCC) and Master Strength and Conditioning Coach (MSCC).

“If member institutions have people with (other) certifications ... it will be up to them to determine whether those credentials are acceptable,” he said.

Parsons did not elaborate on what the process would be to determine if any other certifications would be accepted. He did, however, note the NCAA’s close ties to the NSCA.

“We have a very strong relationship with (the NSCA) and we’ll continue to work with them.”

NSCA-Driven Regulation

One reason Farrell is skeptical of the NCAA’s new regulation is because it limits strength-and-conditioning coaches to NCCA-accredited certifications.

“(It) conveniently left out ANSI (accredited certifications),” he noted, referring to the American National Standards Institute (ANSI), which accredits CrossFit Inc.’s Level 1 Certificate Course.

The Certified CrossFit Trainer (CCFT) credential was accredited by ANSI in September 2015.

CrossFit’s decision to become ANSI accredited—as opposed to NCCA accredited—was based on ANSI’s more thorough review process for certificate courses and certifications.



Mike Warkentin/CrossFit Journal

As in other industries, frivolous regulation limits freedom for practitioners and limits choice for clients.

CrossFit’s decision to become ANSI accredited—as opposed to NCCA accredited—was based on ANSI’s more thorough review process, explained Nicole Carroll, CrossFit’s Director of Certification and Training.

“It was absolutely a conscious effort (to go with ANSI). We were impressed with ANSI’s rigorous processes and standards. ANSI is recognized both nationally and internationally and undergoes review by third-party global accreditation organizations to ensure it is following best practices in its administration of the accreditation program. NCCA does not comply with any such global standards, nor does it undergo third-party review. In short, NCCA does what it believes to be best practice,” she said.

Further, while the NCCA’s process begins and ends with a paper application, ANSI requires an on-site assessment in which organizations have to prove they are doing what their application says.

“We get audited, so ANSI representatives actually ‘visit’ us to investigate processes and conduct interviews to ensure we actually are doing what we say we are doing on paper,” Carroll explained.

Farrell said he believes the NCAA regulation is based solely around NCCA accreditation—and ultimately leaves out other high-quality certifications and accrediting bodies such as ANSI—because of the group that was pushing for the regulation in the first place.

Jay Hoffman confirmed as much.

In connection with a pending legal action, the former NSCA executive director said it was his role to convince the NCAA to sponsor legislation that would require all Division 1 member institutions to hire strength-and-conditioning coaches who held the NSCA’s CSCS credential.



The NSCA's "Essentials of Strength Training and Conditioning" contains pages of info on testing protocols, but the certification lacks a hands-on component that would help ensure competency.

Carey Peterson/CrossFit Journal

And in a 2014 press release, the NSCA **praised** the NCAA for acknowledging the NSCA's efforts for raised certification standards.

The NSCA had pushed for tighter regulations because of more than 20 athlete deaths since 2000, Hoffman said. His statement was reiterated in a **May 1, 2014, NSCA press release**.

Yet Parsons, the NCAA Sport Science Institute director, did not corroborate.

"It's hard for me to know whether there is a quality and safety concern or not," he said.

Parsons also wasn't able to provide any details as to how the regulation will improve athlete safety, nor was he sure how many current strength-and-conditioning coaches have been affected by the legislation and forced to become accredited since implementation.

"I don't have access to that data at this time," he said.

Ellen Gallagher, a former rowing coach at Boston College in Massachusetts and George Mason University in Virginia—both Division 1 schools—said she doesn't believe the regulation has anything to do with athlete safety.

"I don't think it's making the kids any safer. It's making the NSCA money," said Gallagher, who has held the CSCS credential for five years and owns CrossFit Old Bay in Maryland.

Taking the CSCS exam cost her US\$475, and she pays \$50 every three years to renew it. Access to the complete study guide cost an additional \$417.60. Gallagher said she also spends between \$800 and \$1,000 a year on continuing-education credits to keep the CSCS valid.

If the NCAA were genuinely concerned about safety in strength and conditioning, topics related to the causes of the 20 deaths would be tested on the CSCS exam, Gallagher noted.

Neither **sickle cell trait** nor **rhabdomyolysis**—two common causes of the student-athlete deaths—appeared when Gallagher took the CSCS exam in 2010.

The test covered mostly topics related to anatomy, exercise physiology, biomechanics and some nutrition, she said.

Specifically, the **CSCS exam** includes two sections:

- Scientific Foundation
- Practical/Applied

The scientific foundation part of the test involves anatomy, exercise physiology, biomechanics and nutrition, while the practical part of the exam covers questions related to exercise technique, program design, organization and administration.

If the NCAA were truly worried about standards and quality control, wouldn't it also tighten regulations for sports teams' head coaches and assistant coaches? Gallagher asked.

"(The head coaches are the ones) who spend 20-plus hours a week with the athletes," she said. "The actual sport coaches—head coaches, assistant coaches, graduate assistants, volunteer coaches—are not required, as far as I know, to have any coaching credentials by the NCAA."

Jamie Pollard, director of athletics at Iowa State University, confirmed the NCAA does not regulate sports teams' head coaches and assistant coaches at Division 1 schools the way it does strength-and-conditioning coaches.

"Coaches of the various sports teams do not have general certification requirements," Pollard said.

When Gallagher was hired as an assistant rowing coach at Boston College in 2002, she didn't need any coaching certifications. She needed a bachelor's degree and one to three years of previous coaching or rowing experience, preferably at the collegiate level. Instead of passing a standardized exam, most college coaches are hired based on their proven coaching abilities to achieve results, Gallagher explained.

"It would seem that the only coaching credentialing body lobbying for stricter standards is the one that will be making money off of the stricter standards," she noted.

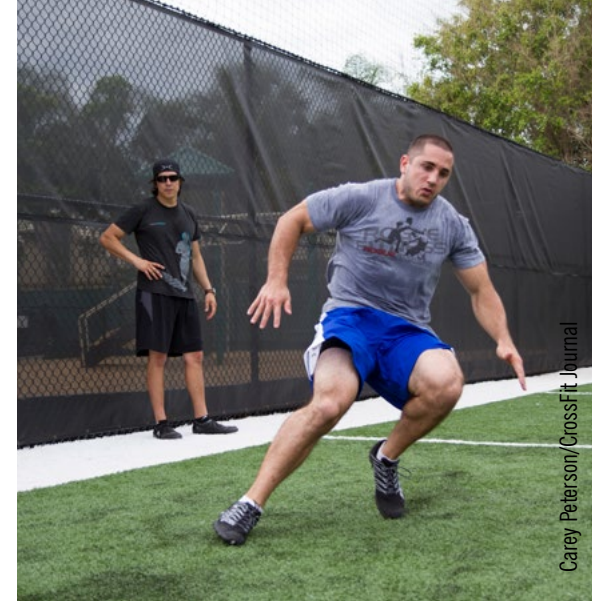
"It would seem that the only coaching credentialing body lobbying for stricter standards is the one that will be making money off of the stricter standards." —Ellen Gallagher



John Meeks (at right) chose not to renew the CSCS credential he held for six years.



Colin Farrell (red shorts) questioned why regulation only applies to Division 1 schools: “They’re only interested in keeping Division 1 kids safe?”



CrossFit Inc. emphasizes hands-on training.

Not only does the new NCAA regulation not extend to team coaches, but it also doesn’t apply to Division 2 or 3 schools.

“They’re only interested in keeping the Division 1 kids safe?” Farrell asked facetiously.

Although the regulation doesn’t yet affect Division 3 schools, Farrell recently changed his title from “strength-and-conditioning coach” to “dryland coach” in case the rule eventually trickles down to Division 3 schools.

“It was a pretty easy loophole to get through,” he said. “The fact that the NCAA will just let you call yourself something different says a lot about their confidence that universities are already hiring good coaches. It doesn’t say much for the NSCA.”

The CSCS Problem

Cal Dietz has been a strength-and-conditioning coach at the University of Minnesota for 15 years. When the NCAA announced its new regulation, he didn’t have an NCCA-accredited certification. Neither did three of his colleagues, including a 64-year-old strength coach who has been coaching at the school for 30-plus years.

To ensure he remained employed, Dietz signed up for the CSCS exam because the credential seemed relatively easy to achieve. He had to pay \$475—which his school covered—and pass a four-hour exam.

Dietz studied the **recommended exam material**; he had no trouble passing. The test, he explained, was a formality.

“I didn’t learn a whole lot of new stuff. Mostly I studied how they were going to ask the questions on the test. I basically had to learn about how to pass that test.”

The CSCS exam, Dietz said, will do little to increase coaching quality at the Division 1 level.

“Taking an exam doesn’t help you become a better coach. Hands-on learning is where you grow. It takes months to learn what we do.”

Farrell, too, is concerned by the CSCS’s lack of real-world training.

“Not having that hands-on experience was a big problem in my eyes. It didn’t give me a lot of confidence in what the certification stood for or could offer me or my athletes.”

Farrell decided against taking the exam.

“You need a four-year degree (to take the CSCS), but it doesn’t have to be in a related field. My history degree was sufficient,” he said. “I could obtain my CSCS without ever having observed an athlete or client or without demonstrating that I ... could even so much as squat.”

Strength-and-conditioning and coaching certifications should require a hands-on, practical component, said Chuck Stiggins.

As executive director of the CSCCA, he said one of his goals is to “bridge the gap between theory and application” through the CSCCA’s certification process.

The CSCCA’s certification process is rigorous and time consuming, Stiggins said. It involves a written exam, an internship with a mentor coach, as well as a practical component in which aspiring coaches are tested on their ability to coach in front of a panel of judges.

Stiggins said he believes his organization prepares strength-and-conditioning coaches incredibly well, especially when compared with many other groups.

“I would never bad-mouth another organization, but there’s a huge difference between the two certifications (CSCCA and the CSCS). We send hundreds of people to the NSCA who don’t qualify to take our exam,” he said. “I’ll leave it at that.”

CrossFit Inc.’s **coach-development process** is similarly rigorous in that it involves written and practical components, as well as continuing-education and performance requirements. The CrossFit Level 1 Certificate Course (CF-L1) is a two-day course with practical, hands-on sessions and a written test, while the CrossFit Level 2 Certificate Course (CF-L2) builds on the CF-L1 with even more interactive work and feedback in a setting with a smaller instructor-to-student ratio. The Certified CrossFit Trainer credential (CCFT/CF-L3) requires a computer-based test, and those who pass the test must accumulate 50 hours of continuing-education credits (CEUs) and 900 coaching hours over the course

of three years to maintain the credential. The CF-L4 is a performance test during which candidates are evaluated live as they instruct CrossFit movements; it also requires CEUs and coaching hours for maintenance.

Regulation and Quality

Increased regulation isn’t the answer to improved quality, said John Meeks, owner of CrossFit Greensboro in North Carolina.

Meeks held his CSCS for six years but recently chose not to **re-certify**. The certification wasn’t adding value to his coaching, he said.

“It isn’t going to change anything. It isn’t going to change (strength-and-conditioning coaches’) knowledge. It’s just a way for somebody to make money.”

Farrell, meanwhile, would rather leave it up to the free market—and the employer—to decide whom to hire.

“Universities should have the ability to figure out on their own what makes a good trainer, a safe trainer,” he said. “It’s just token legislation, a piece of paper that doesn’t actually do anything real.” ■

About the Author: Emily Beers is a CrossFit Journal contributor and coach at **CrossFit Vancouver**. She finished 37th at the 2014 Reebok CrossFit Games.

THE **CrossFit** JOURNAL

CANDY KIDS

Failed by their schools, kids rely on parents and coaches to teach them about proper nutrition.

BY HILARY ACHAUER



Toward the end of our cross-country flight from San Diego, California, to the Northeast, the first-class flight attendant appeared in coach holding a tray of fresh baked cookies.

The sweet, warm smell filled the cabin as she passed over the adults and stopped at every row with kids, carefully handing cookies to all the children and presenting the treats with a smile.

A few minutes later the drink cart rolled down the aisle.

“Orange juice? Apple juice?” the flight attendant asked my kids, ages 7 and 10.

Once we reached our final destination for holidays with family, the treats continued, including after-breakfast lollipops the kids found in the basement, multiple trips to the doughnut shop and sugary Vitaminwater for hydration following a spirited game of driveway basketball.

Each cookie or doughnut was given with love and a sense of celebration. None of the treats on its own was terrible, but day after day the kids exceeded the six-teaspoon added-sugar daily limit recommended by the [World Health Organization](#).

As a health-conscious parent, I had two choices: smile and say nothing or speak up and make everyone feel bad.

I usually picked the first option, knowing our daily healthy eating habits matter more than a few days of holiday excess. But when is it time to choose the second option?

And how do you get through to kids when sugar is available everywhere and they’re told eating it is OK?

The Problem With Sugar

In schools across the United States, kids are taught not to worry about the type of food they eat as long as they balance the sugary drink or cookie with exercise. A recent [Mother Jones article](#) pointed out this curriculum is the product of the [Healthy Weight Commitment Foundation](#), which is sponsored by companies that benefit from kids’ eating junk food: PepsiCo, The Hershey Co., Nestlé USA, The Coca-Cola Co., Unilever, The J.M. Smucker Co. and others.

The “energy balance” concept taught to millions of elementary-school-age kids promotes the idea that a healthy lifestyle is created by ensuring calories in equal calories out. The message is not to avoid sugar or junk food but to balance those foods with exercise.



During a recent vacation, the author and her husband were presented with a dilemma: let their kids eat sugar or try to limit treats over the holiday season.

“All foods can fit into a sensible, balanced diet,” reads the final PowerPoint slide in a [downloadable lesson plan](#) aimed at kids in grades 3-5. Earlier in the presentation, another slide asked, “Where does your energy come from?” and answered with six pictures, four featuring juice, raspberries, a hamburger and an ice-cream cone.

On the surface, the message doesn’t sound all that bad. Exercise is good, right? And don’t most adults talk about burning off a night of indulgence the next day at the gym?

The problem is this concept is not scientifically sound.

In the recent New York Times article “[Rethinking Weight Loss and the Reasons We’re ‘Always Hungry.’](#)” David Ludwig brushed aside the energy-balance idea and suggested another reason for obesity: “It’s the low fat, very high carbohydrate diet that we’ve been eating for the last 40 years, which raises levels of the hormone insulin and programs fat cells to go into calorie storage overdrive.”

Ludwig is professor of nutrition at the Harvard T.H. Chan School of Public Health and the author of “Always Hungry.”

The body simply does not process all foods in the same way, and the energy-balance equation is dated and oversimplified.

The body simply does not process all foods in the same way, and [the energy-balance equation is dated and oversimplified](#). For example, it should be clear that consuming 400 calories of refined sugar will have very dramatic effects on your metabolism as compared to the body’s response to 400 calories derived from a combination of low-glycemic carbohydrates, protein and fat.

That’s the science. Running up against this is a culture that associates sugar with love and good times—especially when it comes to kids. What’s a birthday without cake, Halloween without candy, Easter without chocolate or Christmas without candy canes?

It’s one thing for an adult to give up sugar, but asking kids to do the same is a tall order, especially if they’re told in school that sugar is fine if they exercise.

Before we left for Maine, our family attended our neighborhood holiday parade. In previous years, the kids left the parade with armfuls of candy canes and chocolate, but this time my husband told my kids, “I don’t want you taking any of the candy.” The holidays had started to reach peak sugar intake, and we knew they were already way over their sugar allowance for the week.

The parade started, and we stood in the San Diego sunshine, watching local politicians, Boy Scout troops and marching bands roll by. Each float had a volunteer who handed out sweets to the children watching from the sidewalk. When the volunteers came our way, candy canes in hand, our kids backed away and shook their heads with a backward glance at us, checking to make sure we were serious about enforcing the rule.

The constant refusal of treats started to wear on them. My daughter spent the first 15 minutes scowling and looking sadly at the kids on either side of her happily filling their pockets with candy canes. Eventually, once both kids realized we weren’t going to change our minds, they relaxed and began waving to the local beauty queens and firefighters.





Most kids love candy, but nutrition education can help them learn to enjoy a few treats while making healthy choices as often as possible.

Once we got home, I thought about how we had handled that situation. In our zeal to protect the kids from sugar overload, we went overboard. We should have let them experience the fun of collecting the candy canes, allowing them to eat one or two before throwing out the rest.

This is the challenge with kids and sugar. It's difficult to know where to draw the line—when to step in and when to step back.

Practical Solutions

CrossFit Kids flowmasters Todd Widman and Jon Gary spend a lot of time thinking about how to keep kids healthy. They understand the importance of health but also know the importance of balance and moderation.

“It's the same perspective that we have with movement,” Gary said. “You can't ask for perfection in movement or diet overnight. You need buy-in from kids and from families and parents in order for this to be maintained for a long time.”

Gary, who holds a doctorate in molecular biology, likes to begin with education, letting people know what real food is and how it differs from processed food. The trick, he said, is to resist demonizing—or lauding—specific foods.

“It's just, ‘Hey, these are some all-the-time foods, and these are sometime foods, and these are rare foods.’ Then it's not a taboo thing. Sometimes if you tell certain children not to do something, that's exactly what they want to do. ‘Why is it that I'm not allowed to do that?’ That's just a natural thing,” Gary said.

Gary said he tries not to be too strict either way.

“When an adult client comes in and says, ‘Jon, change me,’ that's carte blanche. When a kid comes in, who knows why they are coming in? Maybe their parents made them,” he said.

Widman, who has two boys 6 and 9, said he struggles with limiting his kids' sugar. Like Gary, he thinks making too much of nutrition can backfire with kids.

“The conundrum is (nutrition) is so important, so we have to make it like, ‘Oh, yeah, it's no big deal.’ The second thing, practically, how the hell do you do that? What I recommend, and what CrossFit Kids recommends, is to do your best to surround them with ... whole food (and) real food. Get them involved in the decision-making process of ‘which would you like: the apple or the carrot or the broccoli’ not ‘what do you want to eat?’”

He said the second challenge is education. That involves teaching kids about macronutrients and the difference between whole and processed food.

“We are always going to eat healthful protein—some type of meat—and we are always going to eat vegetables, and we are going to eat fruit, and sometimes we will have french fries and cake. Why? Because the stuff is not good for us, but it's sure tasty, so every now and then it's appropriate,” Widman said.

With CrossFit Kids, good eating habits are to be honed over time, just like learning how to deadlift. Before Thanksgiving, Gary incorporated nutrition education into his class of young teens, ages 10 to 15. Gary assigned a macronutrient to each kid and used the groups during skill work.

“There were some woefully inadequate abilities there,” Gary said. “When we asked them ‘what is fat?’ they immediately think ‘ham.’”

He said kids don't learn about macronutrients in school, so education at a very basic level is one goal of the CrossFit Kids program.



Kids don't learn about macronutrients in school, so education at a very basic level is one goal of the CrossFit Kids program.

Erin Ferguson, 41, has found a nutrition balance that works for her family. She has three boys aged 2, 6 and 8, and she works part time as a teacher. Her husband, a firefighter paramedic, spends many nights at the fire station. In the Ferguson family, healthy eating is important but not an obsession. The whole family works out at CrossFit 760 in La Costa, California. Ferguson cooks for her family every night, planning the week of meals on her days off, knowing the family will eat dinner together when her husband isn't spending the night at the fire station.

Even though her 6-year-old is a picky eater, Ferguson doesn't cater to his tastes. Sometimes he won't eat what she serves.

"We offer what we offer, and they can have as much or as little of those offerings," Ferguson said. On the nights her husband is at the fire station, she gives the children more traditional kid food, such as chicken nuggets.

After dinner, her kids know not to ask for sugary treats.

"We don't have dessert. It's not a thing in our home. If they are still hungry after a meal, they may have a banana or a yogurt, something like that. But if we are at a birthday party, we definitely don't restrict sugar, but we don't encourage it," Ferguson said.

She and her husband don't dwell on the negative aspects of sugar but talk about why protein and vegetables will help their kids feel good and stay healthy and strong.

"I feel if we restrict something, it makes them want it more. We don't say 'you can't have sugar' but we don't have it in the house," she said.

"We don't stress about it. We know there are going to be ebbs and flows and times where it's around. I don't think we restrict it too much during the holidays. It's part of the holiday season," she said.



Erin Ferguson (right) doesn't worry too much about her kids' sugar consumption over the holidays or at birthday parties, but sweets aren't in the house to tempt her children.

Sugar Strategies for Teens

The advantage with young kids is that although they are offered a staggering amount of sugar, parents generally have a good amount of control over what they eat. I can tell my elementary-school-age kids not to take candy at a parade, and they are young enough they'll listen.

The same tactic won't work with a 16-year-old.

"It's especially challenging telling teenagers how to eat," Gary said.

"Some things I've tried to do with the teenagers I train is I try to associate how they feel with what they are eating," he said. "They can start to see how important that is. If it's a day where maybe they seem a little more tired than usual, instead of asking, 'What's going on?' I ask, 'What did you have for breakfast?' tying their energy levels with what they eat and maybe suggesting an alternative."

Teenagers also have a variety of ways to ingest sugar, such as in caffeine- and sugar-filled energy drinks—things that aren't typically consumed by younger kids.

"I think (consumption of) sugar-laden drinks is off the charts (among high-school students)," Widman said. "Gatorade, Powerade, whatever-ade, those 'health' drinks—they seriously think this is good for you. 'This is getting my electrolytes up—whatever that means—and so I'm drinking it,'" he said.

"Supplements in general and caffeine in specific are out of control for teens," Widman said. He said most teens carry around energy drinks, along with "pre-workout, post-workout, protein shake this, whatever that stuff is."

Rules and restrictions don't work with teenagers, so Gary said the best way to change behavior is through education and reinforcing good nutrition at home.

"If you say, 'Hey, when you go over to your friend's house, you can't have a Pop-Tart,' that's a recipe for 'hey, I'm going to have a Pop-Tart,'" Gary said. However, if your teen is used to a diet of mostly whole, unsweetened food, the Pop-Tart experience might not be as positive as he or she expected.

"You hope that (a healthy diet) changes their palate. If you don't ever have excessively sweet things, the first time you taste a soda, or a candy bar, you're like, 'Whoa, that is weird,'" Gary said.

Balance and Vigilance

Food is much more than sustenance. It's deeply tied to our culture, to the way we celebrate and the way we show love. To deny ourselves—or our children—the joy of special treats on holidays and birthdays is to miss out on a delightful part of life.


Unfortunately, sugary foods have moved from occasional treats to everyday fare for many people. While the body can handle "mistake meals" from time to time, the real negative health effects come from a daily soda habit or a steady diet of sweetened, processed food.

While the body can handle "mistake meals" from time to time, the real negative health effects come from a daily soda habit or a steady diet of sweetened, processed food.

It's all too easy for kids to exceed their daily allotment of added sugar even if schools are working to make it somewhat harder for children to get their hands on sodas and other sugary treats.

A gentle touch is helpful when instructing kids, teens and dubious parents about nutrition. Rather than giving a speech about what to eat, Gary said he'll sometimes provide recipes. Once they see how delicious, affordable and satisfying it is to eat a good meal, they want to learn more.





The thing to remember when working with kids and teens on nutrition is that a one-size-fits-all approach does not exist. Some kids might be motivated by athletic performance and some are just there to have fun.

“It’s all about success,” Gary said, and the challenge lies in figuring out how each child or teen personally defines success. Gary also cautions not to expect perfection right away. Just as a flawless squat is not achieved the first week, ideal nutrition habits are not formed right away.

“You have to allow everyone to do it at their own pace, and when you do, the compliance level increases,” Gary said.

In a CrossFit Kids setting, athletes learn how to move, but they also learn that food is the foundation of fitness and the fuel for performance. Once young, fit children understand the value of good nutrition, you might not have to convince them to make good choices. In fact, you might find your kids glaring at you the next time you pop a cookie into your mouth. ■

About the Author

Hilary Achauer is a freelance writer and editor specializing in health and wellness content. In addition to writing articles, online content, blogs and newsletters, Hilary writes for the CrossFit Journal. To contact her, visit hilaryachauer.com.



THE **CrossFit** JOURNAL

THE SUGARY ALBATROSS

The “energy balance” is a myth.
You can’t outwork a bad diet.

BY BRITTNEY SALINE



Jason Mathews almost lost his pull-up.

Though Mathews has trained at CrossFit Armoury for the past three years, a desk job in sales convenience trumped cleanliness when it came to nutrition, and his 30 unbroken pull-ups soon dwindled to less than a handful.

“Now to get one or two (pull-ups) in a row is tough,” he said.

Despite his commitment to training, a diet dotted with pastries and ice cream—a Dairy Queen is just down the road from the gym—has held him steady at nearly 30 percent body fat.

“I know it’s horrible for me,” he said. “I’ll always (plan to) start eating healthy again tomorrow . . . but there’s not enough tomorrows to make up for the amount of bad I’m doing to myself.”

Though Mathews reports that 75 percent of his diet is clean, “Just one or two (sugary) meals seems to sabotage me,” he said. “It doesn’t matter how many times I work out. It seems like those calories are a lot harder to push out.”

The soda industry would have you believe otherwise.

Where We’ve Gone Wrong

“While both inherited and environmental factors play a role in how much we weigh, and the causes of today’s obesity epidemic are complex, weight gain fundamentally results from an excess of calories consumed vs. calories expended,” claims [CokeSolutions](#), a Coca-Cola Co. platform that [aims](#) to help customers “attract business, boost sales and enhance your operations.”

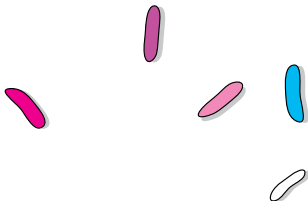
Citing the importance of calorie totals in foods—making no mention of the source or quality of those calories—The Beverage Institute for Health and Wellness, an arm of the The Coca-Cola Co., [asserts](#) that “understanding energy balance is key to maintaining a healthy weight This includes understanding individual caloric needs and the role of regular physical activity in regulating body weight and maintaining overall good health.”

It hasn’t been that simple for Jennifer Lemmen. The 40-year-old has spent the past three years training at CrossFit Wildlife, diligently working to shed the 85 lb. she gained after she quit smoking in 2004. Though she trains four to five days per week, it hasn’t been enough to counter decades-old nutrition habits.

If you want to know how much rowing cancels out a plate of doughnuts, here’s a better question: What if you didn’t eat the doughnuts in the first place?



Mike Warkentin/CrossFit Journal



Though Jennifer Lemmen trains four to five days per week, it hasn't been enough to counter decades-old nutrition habits.

"Sugar seems to be a big demon for me," she said. "It was definitely the sweet treats that got me."

Before CrossFit, Lemmen followed Weight Watchers. The program's points system was simple and allowed her to keep eating the sweets she craved, including the program's packaged cookies and snacks "that are kind of low fat and low salt and (labeled as) good for you," she said. "It didn't matter what you ate as long as you got your number of points per day."

After losing—and regaining—50 lb. with the program, Lemmen started CrossFit in 2013. Figuring that exercise was the missing ingredient, she continued to use the Weight Watchers model for her 2,000-calorie-per-day diet, with most of those calories coming from processed carbohydrates such as breakfast sandwiches, Chinese take-out and ice cream.

"When I started it was like, 'Well, if I just continue eating the way that I have been and I add exercise, I'll lose weight,'" she said.

It worked for a short while. After a few weeks of CrossFit she could run 600 m without getting winded, and she dropped 10 lb. in the first six months. At the one-year mark, she deadlifted 230 lb.

"I remember being so happy I jumped up and down and almost started crying," she said.

But after a year, her progress slowed. The scale stopped moving and the PRs stopped raining, and though many of her peers have since moved from banded to unassisted pull-ups, Lemmen is 5 ft. 9 and 275 lb., so she substitutes ring rows whenever pull-ups appear. Even her lifts—the aspect of CrossFit she excels at most—stopped improving.

"Because I've got extra weight on my frame, it means I'm not gonna have as much on the bar," she said.

Brent Price can empathize.



Mike Warkentin/CrossFit Journal

As silly as it looks to eat a doughnut while training, some people will think nothing of eating poorly before or after training.

When the 32-year-old started training at CrossFit Vancouver in 2011, he weighed almost 300 lb. at 6 ft. Though he lost 35 lb. in his first six months of CrossFit without changing anything else about his lifestyle, he said that it wasn't until he began cutting sugar, alcohol and processed foods from his diet more than two years later that he made lasting, significant progress in his fitness.

"Even after I added CrossFit and I started being active, getting over that hurdle of being able to change my diet was really hard," he said. "I felt really heavy and I felt really slow even though I had definitely made huge gains within CrossFit. I wasn't at my full capacity."

Brent Price said it wasn't until he began cutting sugar, alcohol and processed foods from his diet that he made lasting, significant progress in his fitness.

As a kid, Price went to school with bottles of Fanta and Sprite in his backpack instead of water.

"I was kinda brought up thinking that that was how you hydrate yourself," he said.

He continued the habit into adulthood—now adding rum to his Coke—and lived off french fries, pizza, poutine and ice cream. The final blow was dealt at the 2011 Coachella Valley Music and Arts Festival, when he missed The Dead Weather—his favorite band—because he couldn't cross the festival grounds beneath the blistering California sun in time for the set.

"I kept having to take breaks, and I was out of breath and hot," he said. "It was a really terrible experience, and I was really defeated ... I came back after that and just went straight into CrossFit Vancouver."

Within six months, he'd lost 35 lb.—more than he'd ever lost at one time before. Though the scale slowed down after that, Price never thought twice about his diet.

“I felt like I was putting more time into exercise so I didn’t need to put more time into food, so I ate a lot of processed foods and I was still on the sugar wagon,” he said. “But I wouldn’t really feel bad about it. I was like, ‘Oh, I’m CrossFitting. I’m working out really hard. It doesn’t matter.’”

By 2013, he began to suspect something was amiss. He could not do toes-to-bars or pull-ups—even assisted by a band—and “met-cons were still really hard,” he said.

“For me, that was a kind of a visible wake-up call saying, ‘I’ve been doing this long enough that I should have this by now. Where am I going wrong?’ And that’s when I really started to look at the amount of sugar and alcohol that I was intaking.”

Balance’s Bluff

“Energy balance describes the dynamic relationship between the energy an individual consumes (calories [IN]), the energy their body burns (calories [OUT]), and the storage of excess energy (calories) as body fat. When energy intake consistently exceed energy needs (calories [IN] > calories [OUT]), body fat increases. Conversely, when energy needs consistently exceed energy intake (calories [OUT] > calories [IN]), body fat decreases. When calories [IN] = calories [OUT], there is no change in body fat.” —The Beverage Institute for Health and Wellness.

Dr. David Ludwig, an endocrinologist at Boston Children’s Hospital, disagrees.

“We generally think that weight gain is the unavoidable consequence of consuming too many calories, with fat cells being the passive recipients of that excess,” he wrote in his 2016 book “Always Hungry.” “But fat cells do nothing of consequence without specific instructions—certainly not calorie storage and release, their most critical functions.”

The chief instructor? Insulin, Ludwig wrote.

“Insulin’s effects on calorie storage are so potent that we can consider it the ultimate fat cell fertilizer,” he wrote, describing a study in which rats given insulin infusions gained more weight than their counterpart control rats.

“Even when their food was restricted to that of the control animals, they still became fatter,” Ludwig wrote. “If too much insulin drives fat cells to increase in size and number, what drives the pancreas to produce too much insulin? Carbohydrate, specifically sugar and the highly processed starches that quickly digest into sugar.”



CrossFit, the whiteboard and nutrition: Consider exactly what you’re putting into your body when you’re evaluating what you get out of your body.

Wendy Nielsen

Along with a team of six other researchers, Ludwig conducted a similar [study](#) with human subjects, in which the researchers studied the effects of a 60, 40 and 10 percent carbohydrate diet—each containing the same number of calories—on 32 18-to-40-year-old men and women with body-mass indexes of 27 (obese) or higher over a seven-month period.

“We found that the participants burned about 325 calories a day more on the low-carbohydrate compared to the high-carbohydrate diet,” Ludwig reported. “The high-carbohydrate diet also had the worst effect on major heart disease risk factors, including insulin resistance, triglycerides, and HDL cholesterol. These results ... indicate that all calories are not alike to the body. The type of calories going into the body affects the number of calories going out.”

In other words:

“You cannot exercise away a bad diet,” CrossFit Founder and CEO Greg Glassman [said](#) during CrossFit’s “California Invasion: Rally To Fight Big Soda.”

Referencing the most basic presentation of CrossFit’s diet prescription, he added: “The meat and vegetables, nuts and seeds, some fruit, little starch, no sugar component is critical.”

“The meat and vegetables, nuts and seeds, some fruit, little starch, no sugar component is critical.”
—Greg Glassman

The Fruits of Their Labor

Today, Lemmen is working on cutting sugar out of her diet. After seeing a former CrossFit Wildlife athlete who had since moved away and acquired a new, chiseled physique, Lemmen asked her “what the deal was.”

The athlete had been meeting with a nutritionist who did CrossFit and recommended a diet low in sugar and high in protein, and so in June,



When her training plateaued, Jennifer Lemmen addressed her diet. Improvements came shortly thereafter.

Lemmen met with the nutritionist, too. Within a month of following a diet of mostly vegetables, meat and no refined sugar, “My performance at the gym went up and I lost 10 pounds,” Lemmen reported.

In early 2014, Price also met with a CrossFitting nutritionist.

“We sat down and talked (about) what I was actually doing to myself by continuing to eat sugar and drink pop,” he said, recalling a discussion about the potential for developing Type 2 diabetes down the road. “When you are playing with your blood sugar to that extreme, after (learning) what that could do to you, it was easier for me to make the decision not to have it.”

He swapped sweet cereals for poached eggs in the morning and cut the soda and ice cream altogether. Within a week, he was sleeping better and training harder. He began tracking his macronutrients and doing weekly meal prep.



In 2011, Brent Price weighed close to 300 lb. Through fitness and nutrition, he’s dropped that number to about 200 lb.

“It created this environment of the entire day (being) dedicated to health instead of just the hour you spend at the gym,” he said.

Today, two years after quitting the sweet stuff, Price (who now trains at Studeo 55 CrossFit) weighs around 200 lb. and recently PR’d his snatch at 190 lb., a 55-lb. improvement from his sugar-laden days.

“One of the things that instantly went up was my snatch because I was able to move faster,” he reported.

He can also comfortably string muscle-ups together in sets of 10, and last April, he was able to run from stage to stage at Coachella, bare-chested and bursting with self-confidence.

“It was a big day for me to walk in there,” he recalled. “It made me really realize the difference in what a healthy lifestyle can make in everything that you do.” ■

About the Author: Brittney Saline contributes to the CrossFit Journal and the CrossFit Games website, and she trains at [CrossFit St. Paul](#). To contact her, visit [brittneysaline.com](#).

THE

CrossFit

KITCHEN



BACON-CRUSTED BREAKFAST PIZZA WITH BROCCOLI

By Nick Massie

Overview

Nick Massie of PaleoNick.com is the instructor for the newest CrossFit Specialty Course: [Culinary Ninja](#). In this unique pizza recipe, he brings together eggs, crispy bacon and roasted broccoli to create a satisfying and balanced breakfast.

Ingredients for Pizza

- 12 slices of bacon
- 12 eggs
- Freshly ground black pepper, to taste

Directions for Pizza

1. Place a 14-inch nonstick pan or cast-iron skillet over medium-high heat. Add bacon to cover the bottom of the pan, overfilling a little because the bacon will shrink.
2. Allow the bacon to cook through on the first side before flipping. You are only going to flip it once, so let it crisp up nicely, then flip.
3. The next step is to remove most of the rendered fat from the pan. Do this by tilting the pan to the side and spooning the fat into a small stainless-steel bowl.
4. Crack 12 eggs over the "bacon crust," doing your best to keep the yolks intact. The pan should be hot enough so that the whites begin to set immediately. From that point, you are simply managing the heat and seasoning the top with black pepper. You want to achieve a crisp crust all along the bottom, but you don't want to burn it. Manage the heat so all the egg whites are set just as the crust is crispy and crunchy.
5. Once the whites are set, use a rubber spatula to loosen the crisp under crust completely. The pizza should now move freely when you shake the pan back and forth. Use the spatula to slide the pizza out of the pan onto a cutting board. Use a chef's knife to cut the pizza into eight slices.
6. Place two slices on a plate with a side of roasted broccoli.

1 of 2



Ingredients for Broccoli

- 3 heads of broccoli, cut into large florets
- 4 tbsp. Paleo Grind Veggie Victory
- Olive oil, as needed

Directions for Broccoli

1. Preheat your oven to 400 F.
2. Place broccoli florets into a large mixing bowl. Add Veggie Victory and olive oil and toss to coat.
3. Line a sheet pan with foil and spread broccoli onto pan. Drizzle with olive oil once again.
4. Place the sheet pan in the oven and roast until the broccoli becomes well caramelized, approximately 25 minutes.
5. Remove from oven and serve with bacon-crusted breakfast pizza.



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VISITING OURS

When drop-ins arrive at your gym, coaches recommend a friendly, inquisitive approach for best results.

BY ANDRÉA MARIA CECIL



Zach Forrest's CrossFit Max Effort in Las Vegas welcomes large numbers of drop-ins, so he's an expert when it comes to making sure visitors get a great workout.

Ask questions. Lots of questions.

When it comes to coaching strangers, that's the advice from affiliate owners in some of the country's most visited spots.

Inquire about medical conditions, how long the athlete has been doing CrossFit, his or her home gym, among other things, advised Charlotte Psaila, owner of CrossFit Kapaa on the Hawaiian island of Kauai. In the winter and summer months, the 800-square-foot affiliate sees at least two drop-ins a day, she said.

"Pretend like they are newbies 'cause to us they are newbies," Psaila explained. "We've never seen them do anything."

Zach Forrest echoed those sentiments.

If the workout that day involves snatching, then the drop-in athlete will perform the same warm-up as everyone else, said the owner of CrossFit Max Effort in Las Vegas, Nevada. There, coaches interact with 10 to 20 drop-ins on weekdays, he said.

"We'll still review basic pull mechanics from the ground, basic squat positioning and receiving position. We're still going to treat them as though they're learning for the first time just to ensure they're on the same page as us."

**"We're still going to treat them
as though they're learning
for the first time just to ensure they're
on the same page as us."**

—Zach Forrest

Same procedure at CrossFit 1727, though the young affiliate sees only about five drop-in athletes per month, said owner Joe Shea.

"They'll do whatever we're doing that day. They'll go through our progressions, our warm-ups and all that stuff," he said.

Shea's primary concern is that athletes stay safe and move through a complete range of motion.

“The most important thing ...
when it comes to their receptiveness
to coaching is to be as friendly
as possible.”

—Zach Forrest

“I don’t change their style ... (I) just give cues. If they’re doing something that I feel is wrong, I’ll correct it,” he said. “If they’re just doing something slightly different, I’ll just let them be.”

Also important: Never assume anything, Forrest said.

Recently CrossFit Max Effort coaches didn’t find out until the middle of a back-squat workout that a drop-in had not only started CrossFit a mere two weeks earlier but had also broken his back in the past. They should have asked more questions sooner, Forrest said.

“They may say they’ve been doing CrossFit for two years, but we still build them from the ground up as if they’ve only been doing it for a week. And always, always, always ask for injuries,” emphasized Forrest, a member of CrossFit Inc.’s Seminar Staff.

For Jonas Grabarnick, hosting drop-in athletes tends to be more complicated.

His affiliate, CrossFit North Miami Beach in Florida, sees as many as 12 visitors a week from all over the world—Argentina, Brazil, Canada, Finland, Russia.

“There’s a lot of language-barrier stuff,” he said. “I grew up in Miami. I’m 42. I was born and raised here. My Spanish is not what it should be. My Portuguese ... my Russian and my French Canadian are even worse.”

Sometimes Grabarnick reverts to using his hands to communicate.

“We make it work,” he added with a laugh.

But before coaches even arrive at the point of teaching movement and providing cues, first things first: Be welcoming.

“The most important thing ... when it comes to their receptiveness to coaching is to be as friendly as possible,” Forrest said.

You have to gain their trust before you can start coaching them, Grabarnick said.

“(I don’t) really jump into the arena of adopting them as my athletes,” he explained. “I try to expand on what they’re already doing.”

Regardless of experience, no one wants to walk out of an affiliate feeling worse about themselves, Psaila noted.

“Keep it light and fun,” she said. “If a visitor were to do a horrible squat, I wouldn’t go and yell at them and leave a bad taste in their mouth. ... You want them to leave your gym feeling like you helped them.” ■

About the Author:

Andréa Maria Cecil is assistant managing editor and head writer of the CrossFit Journal.

Located on the island of Kauai, CrossFit Kapaa is a hotspot for vacationing CrossFitters. Owner Charlotte Psaila said she works hard to ensure they have fun at her gym.

Charlotte Psaila