When the scale sucks:7 better ways to know if your nutrition plan is working.

The Marble Method

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1. You feel satisfied after meals

Does it ever feel like you're hungry all the time? Like, you know you need to "get control", but you can't seem to "find the willpower" to close the bag of candy or stop picking off your kids' dinner plates?

As we digest our food, the gut sends signals to the brain about how much energy we've consumed to trigger satiation (the feeling of fullness) so we know when we've had enough.

Unfortunately, it turns out that all it takes to override thousands of years of relationship building between gut and brain is a humble bag of Cheetos.

Processed food, with its extreme energy density and intense salty / sweet / fatty / crunchy / creamy tastes, tells our brain that we've hit the calorie jackpot: Eat until it's gone! Stock up! You'll have enough energy and nutrients to last for weeks!

Of course, for most people, the junk food never runs out, so you're left eating and eating and eating with zero satiation (and almost zero actual nutrition).

What does progress look like?

With your new nutrition plan, you're eating slowly.

Choosing fresh foods.

Leaving less room in your diet for processed foods that rev the appetite and never seem to fill you up.

Fresh fruit, vegetables, meat, fish, beans, and legumes are taking up new space in your body, nourishing you, helping you feel satisfied. They signal to your gut and brain that It's OK. We are OK. We are safe and comfortable and fed. We can stop now.Imagine, for the first time, feeling "full". Not stuffed. Just satisfied. Feeling like you've had enough.

Your gut and brain are calm. No panic. No restless pacing to the pantry.

You're just... done. Without any worry. Yep, this is all possible. In fact, this is what you'll start to experience once your nutrition (and exercise) plan is on track. It's an early sign of progress you can sense into even before you lose any weight.(Quick note: If you're a smaller — and younger — guy trying to put on muscle, this may not apply to you. Being hungry all the time may be a good thing. Keep eating and lifting heavy!)

2. You have more energy

Maybe you can't remember a time when you didn't feel exhausted. Your alarm is your enemy. You don't hit snooze; you literally punch the clock to make it shut up. Mid-afternoon, you need a caffeine and sugar hit to keep your eyelids propped open, and by 8pm you're crashing in your La-Z-Boy chair in front of the TV. Your brain feels like mush and your body like molasses.



Maybe your brain and body are getting too much processed food and too much sugar; maybe you're borrowing energy from the future with stimulants.

Maybe you're not getting enough vitamins, minerals, and other nutrients. Even small deficiencies in certain nutrients—which are much more common than you think—can drain your energy and fog up your focus.

What progress looks like:

One day, you wake up one minute before your alarm. Your eyes are actually open. You even feel... kind of... happy? You don't need seven shots of espresso throughout the day just to cope with your work inbox. You pay attention, even during the 3pm accounting meeting.

When you take your kids to the playground after dinner, you find yourself clambering up the climbing wall and slithering down the slide along with them. Back at home, your La-Z-Boy feels lonely and your TV abandoned.

A good nutrition plan gives you energy—constant, steady, all-day energy rather than a brief buzz and a crash. If you get it right, you'll start experiencing this over time. Sometimes even before the scale needle starts to move.

How vitamins and minerals influence your energy levels.

The feeling of having more energy can come from the nutrients in fresh, whole foods, which we need for our bodies and brains to work properly.

Try to get these nutrients through your diet, instead of supplementing.

Vitamin B1 & B2: We need thiamine (B1) to convert carbohydrates into energy (ATP). Riboflavin (B2) helps release energy in the Krebs cycle (the process by which our bodies generate energy).

- Vitamin B6: We need vitamin B6's active form pyridoxine-5'-phosphate (PLP) to make the amino acids L- tryptophan and L-dopa into the feel-good neurotransmitters serotonin and dopamine, both of which are important for cognitive function and focus.
 Vitamin B6 is also important for our cells' mitochondria (power plant), helping to regulate the enzymes we use to draw energy from food.
- Vitamin B12: We need vitamin B12 to protect and preserve the myelin sheath, which covers neurons and helps conduct the electrical signals sent around the body. B12 helps make neurotransmitters and metabolize fats and carbohydrate, your main energy sources.

- Vitamin C: We need vitamin C to make carnitine, which transports long-chain fatty acids to the mitochondria to be used for energy. Vitamin C also helps us produce catecholamines, a group of hormones and neurotransmitters (such as adrenaline [epinephrine] and dopamine) that are usually stimulants.
- Magnesium: We need magnesium for metabolic reactions, especially those that convert food into energy. Having more magnesium seems to improve cognitive abilities, while not enough seems to make cognition worse.
 Without enough magnesium in our cells, insulin doesn't work as well, which makes it hard for us to use glucose.
 Many enzymes that help us convert food into energy need magnesium.

- Calcium: Calcium helps to turn fatty acids into energy; it helps to modulate ATP production (aka our bodies' fuel).
 As with magnesium, without enough calcium, our insulin may not work properly. Insulin is one of the main hormones of blood sugar regulation, which affects our energy levels.
- Zinc: Zinc is a trace mineral, so we don't need a lot, but we definitely need some. Zinc contributes to at least 100 enzymes in our body, many of which have to do with energy metabolism. When zinc is low, we don't secrete as much insulin (which then causes problems with glucose metabolism); nor do we metabolize lipids (fats) nor protein well. If we don't get enough zinc, we don't get proper energy from food nor build proteins / muscle.

 Water: Our brains depend on electrolytes—dissolved ions of minerals such as potassium, sodium, calcium, and magnesium—to work properly. We need to carefully balance our electrolytes and fluid to send chemical and electrical signals in the brain (aka neurotransmission). If we get enough water, we maintain that balance. If we're dehydrated, our brain (and our thinking) suffers.

3. You're sleeping better

You know those nights when you just can't seem to fall asleep? Or when you toss and turn in a weird, hallucinogenic, sleeping-but-not-sleeping state?

Sometimes, Precision Nutrition
Coaching clients don't even know
how tired and sleep-deprived they
are, because five hours of fitful
flailing is their normal. There can be
many reasons for poor sleep: stress,
aging, hormonal changes, being a
new parent, getting too much light
late at night, jet lag, and so on.

Nutrition and exercise can play a role. For instance, if you diet too stringently, over-train (or under-recover), amp yourself up with tough workouts, or over-eat heavy meals late at night, you may not sleep well.

You may drink too much alcohol and caffeine. You may not get enough protein (to make the right neurotransmitters), nor enough vitamins and minerals (ditto).

You may also have disrupted hormones (such as cortisol, growth hormone, thyroid hormone, and sex hormones such as estrogen and testosterone) from stress and poor eating habits, all of which are important for good and restful sleep.

What progress looks like:

Now, with your nutrition plan, you're getting enough good stuff to make the brain chemicals you need.

You've switched to half-glasses of wine with dinner, and—thanks to your newfound energy—laid off the afternoon espresso. Speaking of dinner, it's a smaller portion that doesn't leave you breathing in little huffs and give you nightmares about being chased by cheese.

In short, your body is no longer in an always-on-battle-stations-go state of chemical panic.
All of a sudden, you seem to wind down an hour before bedtime without a problem. You follow your sleep ritual and conk out easier than ever.

How does nutrition help encourage better sleep?

- Fresh, whole foods contain more fiber, protein, and healthy fats, which require more time and effort to digest than the refined carbohydrates that make up the majority of processed food. This keeps you satisfied longer, stabilizing your blood sugar and various hormones needed for good sleep.
- Tryptophan, an amino acid in highquality protein sources, is a precursor to serotonin, which gets converted into melatonin to encourage sleep.
- Balancing your energy intake alone can lead to better rest if it helps you lose excess body fat. (Excess body fat can make sleep uncomfortable because of heartburn, lack of mobility, sleep apnea, and other obesity-related problems.)

4. Your clothes feel just a little looser (or tighter)

Today's the day. You reach into your closet, into the back, for that piece of clothing. You know, the one that almost never fits unless you're massively dehydrated, wrapped in Saran Wrap, and holding your breath simultaneously.

Wow. It fits. Not just suck-it-in-and-suffer fits. But, like, really fits. It feels good. It looks good. No pulling fabric, no weird wrinkles, no strangling collars, no bulges of buttons or belts or bra straps.

Or maybe you've pulled out some other piece of clothing. The one that normally drapes over you like an oversized beach towel over a coat hanger. The T-shirt you can't seem to fill out, the armholes with room to spare and a flapping curtain where you feel like billowing pecs should be.

Wow again. It doesn't fit. And that's great. Because your chest and arms and shoulders and back are now too muscular for it. The shirt is still flapping loose in one area, though: your newly whittled waist.

What progress looks like:

Muscle and bone are denser than body fat. When we build this lean mass, we often get heavier but smaller (at least in certain areas).

If you're male, you may find your shoulders broadening, chest filling out, back wings fluttering, and a new case of "hockey ass" from muscular glutes... but your waist shrinking.

If you're female, you may find that your scale weight goes up but your clothing size goes down (and you ace your bone density scan!).

How does lean mass compare to fat?

- Muscle cells are tightly packed with myofibrils. When these contract with enough intensity, the body adapts by generating more myofibrils and sarcomeres (assuming proper training and nutrition), increasing the density (and strength) of the muscle.
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- Even denser, bone is composed of complex combinations of calcium and phosphorus, heavy minerals that provide strength, flexibility, and support for all the stress we put on them. Bones also contain a significant amount of protein (mostly collagentype proteins).
- Adipose (fat) tissue, on the other hand, is loosely composed of adipocytes, cells that contain light, fluffy lipid molecules (mainly triglycerides). Unlike bone and muscle mass, fat tissue provides unlimited storage all over the body, so it will continue to grow when we over-eat.
- This means: Muscle and bone are 18 and 33 percent heavier than fat by volume. It also means that your exercise and nutrition plan can help you look (and function) better without leading to weight loss.

5. You're in a better mood

Have people secretly nicknamed you Stabby, Grumpy, Angsty, Miserable Cuss, or Party Pooper? Does it physically hurt you to smile?

The phenomenon of "hangry" is so well known that candy bar commercials joke about it, noting that "You're not yourself when you're hungry."

You may also not be your best self when you're deprived of the nutrients your brain needs to keep you sailing on an even emotional keel, without crashing into the rocks.

What progress looks like:

Improving our mental and emotional outlook with good nutrition can show up in surprising ways. Here are some of the things Precision Nutrition Coaching clients have discovered after consistently improving their nutrition habits.

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"I feel..."More confident."
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[&]quot;Like change is possible.

[&]quot;"Better about my choices."

[&]quot;More knowledgeable."

[&]quot;Clearer about my goals, and the path to get to them."

[&]quot;Like I walk tall now."

[&]quot;Mentally more 'on', clearer-headed and less 'fuzzy'."

[&]quot;Happier and more positive."

[&]quot;More open to trying new things."

[&]quot;Motivated!"

In part, these changes come from the experience of changing habits. When we try something, and succeed, we get a little jolt of inspiration that encourages us to keep going.

These changes also come from the nutrition itself: Our brains and bodies have the nutrients and chemical tools they need to do their jobs—to regulate our emotions, to make our "happy neurotransmitters", and to send those cheery and calming signals where they should go.

How food influences your mood.

The connection between our food, neurotransmitters, and blood sugar regulation means that how we feel depends a lot on what we eat.

- Eating too much sugar may make you depressed. One large study on subjects from six different countries found that eating a lot of sugar and feeling depressed were closely related. This may be from chronically elevated insulin—the body's continuous attempt to clear the constant onslaught of sugar from the bloodstream may cause mood crashes.
- Having enough omega-3 fatty acids seems to put us in better moods. Include more nuts, fish, and seafood (like salmon, sardines, mackerel, crab and oysters) in your diet to get these happy healthy fats. (Bonus! Oysters are a great source of zinc too.)

- Consuming too much vegetable oil, hydrogenated fats and trans fats may worsen our moods. These omega-6 fats make it hard for our body's to process omega-3 fatty acids. Low levels of omega-3s are linked to symptoms of depression, being crabbier, and even being more impulsive. (Which can mean poor food choices—a vicious cycle.) Omega-6s may also increase inflammation, which can affect our brains. Many neurodegenerative disorders and mental health issues are linked to brain inflammation.
- Eating lean proteins including chicken, turkey, and fish increases your consumption of tryptophan. Tryptophan is a building block of serotonin, a neurotransmitter that helps us feel relaxed and happy.

6.You're stronger and have more endurance

Around the time you first start your nutrition overhaul, workouts might feel like a slog. Maybe you feel weak, uncoordinated and slow. Maybe you pick your dumbbells off the small end of the rack. And boy are you sore afterwards.

And then, gradually, you're less sore. More of an "umph" getting out of bed than an "AAAAAUUUUGHHHH!!!!" You're more zesty. Perhaps another set! you think, jauntily, suddenly full of beans. You eye the next dumbbell up.

What progress looks like:

- You're using the same weight with more range of motion. A month ago, you couldn't squat—you could only do a power curtsey. Now those knees, hips, and ankles are bendin' and behavin' like Plastic Man. You can pick up your laundry, get off the toilet, and squat down to pick up your toddler like a pro! In another month, you might take on your other kid at basketball.
- Your muscles aren't as sore. Intense exercise and new movements create microdamage—tiny tears in muscle fibers—that we must rebuild. This process of repair is good—it's what helps us get stronger, fitter, and more muscular—but in the early stages, it hurts. Inflammation goes up; you might get stiffness and swelling from fluid rushing in to help heal the damage. As you progress, and give your body lots of nutrients to rebuild, this inflammation decreases and the repair process speeds up.

You can do more work

overall. Whether it's running, swimming, or cycling longer distances; lifting more weight for a longer workout; scrambling up a higher and tougher wall; or playing an extra round of tennis or golf; you're simply able to do more stuff, more often. Good nutrition has improved your recovery and energy levels.

You're fresher and recover

better. Again, you're giving your body the stuff it needs to do its job of making you stronger, faster, better, and fitter. Your cells are sucking in oxygen, dumping waste products, making more enzymes, and overall high-fiving each other.

7. It feels more like a lifestyle than a "diet"

"Diets" are a chore. They're another to-do that you superimpose over your busy life, and another boring, strict, overly complicated task you can't wait to quit.

When we do quit—because of course we do, it's temporary, right?
—we're back where we started.
Back "off the diet". Back to processed foods, never-ending hunger, frustration, and weight gain.

What progress looks like:

Progress here happens when you're just... living. You're in a nice, natural, normal-day rhythm that doesn't feel like being "on" or "off" anything.

Eating well stops being A Thing and just starts being your daily life.

- You naturally gravitate toward whole foods. You pick the salmon over the hot dog without even thinking about it. You think, "A fresh salad would be nice", and you really mean it.
- You have a plan. Prepping meals in advance and keeping healthy backup options on hand is a regular part of your weekly routine now. You look for challenges and develop strategies for staying on track.

• You don't "mess up" anymore. Let me be clear: You still eat the birthday cake and the Christmas cookies and maybe go ahead and snarf the tub of popcorn at the movie theater. You don't consider this "bad" or "guilt-inducing" any more. They're just an occasional part of enjoying life. You savor them and then go back to eating mostly fresh, whole foods like you always do. No biggie.

Yep, this is also possible. It's a natural and normal consequence of eating and exercising in a sensible and sane way. And it's a sign of progress, regardless of what the scale is doing.

1. Add, don't subtract.

If you're in a "diet mentality", each day feels like a new battle to avoid the "bad foods". So let's flip that. Add, don't subtract.

Don't "avoid" your "junk food".

Don't "avoid" your prepackaged meals.

Don't "avoid" dessert.

Just add so much healthy stuff—water, lean protein, fresh fruit and vegetables—that there's less room or desire left over for food that doesn't support your goals.

And at first, look for what you gain rather than what you lose. Like muscle. Strength. Confidence. Energy. Sanity.

Measure—and celebrate your progress.

IfLook for signs of progress everywhere. Everything counts, no matter how small.Track them.Celebrate them like that first springtime crocus.

3. Focus on little things.

Make mini-goals. Nano-goals, if you want. For the day. For the week. For the next five minutes. Whatever you need to stay on track and feeling like you can do this. Each time you hit those tiny goals, reward yourself (in a healthy way).

4. Print, use, share.

Print out these effective progress trackers from the newly updated Precision Nutrition Level 1 Certification to make it easier to monitor your progress. No scale required.

- Poster: Initial signs that your nutrition plan is working: Keep this around the house and the gym for a reminder of the things that matter more than the number on the scale on a given day.
- The Hunger Game Tracking Sheet: Practice tuning into your physical hunger and fullness cues.
- Body Measurements Forms: Measure regularly and accurately to help you track your fitness progress.
- Athletic Performance Indicators Food Journal: Track how your dietary intake affects your mood, energy, and more with the same sheet Precision Nutrition gives to athlete clients.

5. Find a coach to support and celebrate your progress.

It's often a lot easier (and always a lot more fun) to work toward your body transformation goal with help from an experienced nutrition coach.

If you've been trying to make progress for a while, but just aren't seeing results, consider getting some extra support.

With the right person in your corner, you'll develop more effective change strategies and be better able to recognize progress markers and maintain the motivation it takes to make it to the finish line.

You Are Enough!