## Repeat after me: "Hunger is my friend!"

Most of us are familiar with the sensation: You get that empty feeling in your stomach, your appetite revs up, the smell of Cinnabons or pizza or donuts becomes irresistible. It's hunger, a primal urge to eat, which is relentless.

Many people would say "I just hate it when I feel hungry!" Little kids get that pouty look like they're about to burst into tears until an astute parent comes up with the diagnosis: "Time to eat!" Some observant Jews approach the fast of Yom Kippur with trepidation and wish one another (somewhat irreligiously) "an easy fast."



We most often think of hunger as a bad thing, but could elements of hunger actually be good for us?

All in all, we are culturally conditioned and physiologically programmed to view hunger as a very bad thing, to be alleviated as soon as possible.

Why not flip the script?

Years ago, I was lecturing on a cruise ship when something possessed me to exhort my audience, who by then were probably thinking about what they were going to order for lunch: "Repeat after me: Hunger is my Friend!"

They were bemused at first, but then I repeated: "Make it your personal mantra: Hunger is my Friend . . . Hunger is my Friend . . . c'mon, repeat after me: Hunger is my Friend!"

Soon, improbably, I had the whole salon gamely chanting "Hunger is my Friend!"

Then, I explained why I had them do that.

Biologically, all animals are programmed with a powerful drive to seek energy from food. Diffidence about eating would have ensured that our hominid ancestors millions of years ago would never have passed their genes along to us. Enduring harsh weather conditions, exhaustion, danger from predators and competing bands of pre-humans, they emerged from their shelters and began the arduous daily chore of searching for calories.

The driving force was hunger. A hungry human will do almost anything to get food. And from an evolutionary standpoint, that assures our survival and our ability to pass our hunger genes down to future generations.

Our society is predicated on the "pursuit of happiness": contentment, satisfaction, equilibrium and freedom from want. We are conditioned to believe that distress, exhaustion, anxiety, hunger, pain and unrequited sexual desire are unnatural departures from the ideal state we have come to accept as our birthright.

But, from a biological standpoint, we are exquisite products of an evolutionary process that has built in these dysphoric states as the impetus to survive hostile environments. Remember, nature is agnostic as to whether we feel "good"-the goal of natural selection is to get us to survive to perpetuate our species. Or not, as the cavalcade of prehistoric extinctions clearly illustrates.

So, when you're hungry, you are experiencing one of the fundamental processes of nature. It also is a process that, while uncomfortable, we are built to withstand with multiple backup systems to keep us functioning.

What happens when we are hungry? After we expend the sugar in our bloodstream (a couple of hours) we draw sugar from our livers and muscles in the form of glycogen (a few more hours). Then we get hungry, because the body is trying to reinstate sugar equilibrium by getting us to ingest food.

But failing that, we begin to efficiently draw down on our fat stores. Humans are exquisitely adapted to starvation, because, unlike most primates like monkeys and gorillas, we store fat very efficiently. Primitive human hunter-gatherers regularly wax and wane in body weight according to food availability.

The process of fat-burning is called ketosis, and it can be achieved via fasting, or via a very low carbohydrate diet, something that all but the most zealous dieters don't adhere to.

So . . . hooray! If you're hungry, chances are you're burning fat by igniting ketosis, a natural adaptive state seldom reached by modern humans.

What's interesting about the process of ketosis is that it tends to mute hunger signals and minimize the distress of low blood sugar, a frequent accompaniment of high refined carbohydrate diets. You're still hungry, but the distress of roller-coaster blood sugars is gone, leaving you freer to make more judicious food choices.

What are some other ways to thwart hunger? Via two things modern humans don't get enough of: moderate exercise and adequate sleep. Paradoxically, while when you drive your car it requires more gas, moderate exercise tends to suppress feelings of hunger, at least for a while. And sleep deprivation revs insulin, which in excess can cause blood sugar to drop, triggering hunger.

And, yes, stress increases hunger for a variety of reasons. Eating is a form of addictive gratification that hits the brain's feel-good "sweet spot"; additionally, the stress hormone cortisol helps us get ready for "fight or flight" by fueling our bodies with energy-rich food.

Excess insulin drives our appetites with "false hunger" even if we're fat. It drives blood sugar down, giving us the erroneous impression we are hungry; and insulin antagonizes leptin, a hormone that gives us a sense of satiety.

Now that you know all these facts, it's time for a little cognitive reframing. Repeat after me: Hunger is my Friend!