When you hear the word creating, what comes to mind? Now, for most people, it's probably going to be lifting heavy weights at the gym. And for decades, that's essentially how creating hazard, marketed as a sports supplement to help athletes build muscle, increased strength and improve performance.

But that view of creatine is becoming outdated because research is showing us that creating there's something much more fundamental. It helps your cells produce energy.

And that means creatine may have benefits x10 well beyond the gym to your muscles as you age, your brain, your memory, your metabolism, your physical function, and potentially your ability to maintain independence later in life.

So in this video, I know why I think creatine is one of the most interesting nutritional supplements for healthy aging, including for people who do not consider themselves to be athletes.

And I'm also going to tell you how much creatine people typically take, which form has the best research and address. One of the biggest concerns I hear from patients.

Now, first, creatine isn't a drug. It certainly isn't a steroid. Creatine is a compound your body naturally produces from three amino acids arginine, glycine, and methionine is produced primarily in the liver and kidneys, and your brain can produce some creatine as well.

You also obtain creating through food. The richest dietary sources are animal foods, especially meat and fish. Plant foods contain very little creatine, which is one reason vegetarians and vegans tend to have lower creatine stores.

But here is where creatine becomes interesting. Your body converts creatine into something called fossil creatine and fossil creatine apps, almost like a cellular backup battery.

To understand why that matters, you need to understand ATP. ATP is adenosine triphosphate. It's essentially the energy currency of your cells. Every time a muscle contracts, every time a neuron fires, every time your cells perform energy demanding work, ATP is being used.

Now, when ATP gives up one of its phosphate groups, it becomes ATP. Your cells then have to convert that ATP back into ATP. And that's where creatine comes in.

Fossil creatine can rapidly donate a phosphate group to aid helping regenerate your ATP. So think of creating as helping yourselves recharge their energy supply very quickly.

And that explains why athletes discovered its benefits decades ago. If your muscles can regenerate ATP more efficiently during intense activity, you may be able to produce more power, perform another repetition, or recover more effectively.

But here's the important point. Your muscles aren't the only cells that need energy. Your brain has enormous energy requirements as well. And this is why researchers are increasingly interested in creating for much more than athletic performance.

Now, one of the most important changes that occurs with aging is something most people don't think enough about. We gradually lose muscle, and we're not just talking about having smaller biceps.

Muscle is a metabolically active organ. You need muscles to walk the climb stairs to get out of a chair, to maintain balance, to stabilize your joints, also to maintain healthy glucose metabolism.

And ultimately, muscle is one of the things that helps you remain physically independent as you get older. Age related loss of muscle mass and function can eventually contribute to sarcopenia and frailty.

This is why I tell patients that maintaining muscle isn't simply about looking fit. It's a part of a longevity strategy. And this is one area where the research on creaking is especially interested.

Studies involving older adults have found that when creating is combined with the resistance training, it can enhance some improvements in lean tissue strength and physical performance compared with resistance exercise alone.

And that combination is important. Now, I don't want anyone to watch this video to think I'll take creatine, sit on the couch and preserve all my muscle.

I've seen some videos basically recommending that. That's not how I recommend thinking about it. Creatine is not a replacement for exercise. It's something that may help you get more benefit from the exercise you're already doing.

And if you're over 50 or 60, resistance exercise becomes especially important. You don't need to become a bodybuilder. You can use weights, resistance bands, machines, bodyweight exercises.

What matters is giving your muscles an appropriate stimulus. Now combine that with adequate protein, good nutrition recovery, and creatine. And now you're giving your body the tools that needs to preserve muscle.

Now we get to the area that surprises many of my patients. Creatine seems to support the brain very effectively. Remember what I said earlier creatine helps regenerate ATP and your brain is an extremely energy demanding organ.

Your neurons require tremendous amounts of energy to maintain electrical gradients, communicate with one another. Release neurotransmitters and perform all the processes involved in thinking and memory.

Creatine is present in the brain, and researchers have investigated whether increasing creaking availability could improve certain aspects of cognitive performance.

A systematic review and meta analysis of randomized controlled trials found improvements in measures of memory with treating supplementation, with particularly interesting findings in older adults.

Other research has reported potential improvements in areas such as attention and processing speed. Now what could this into perspective? The evidence for muscle performance is much stronger and more than the evidence for cognition, and not every study has demonstrated cognitive improvement.

And we should not promote creatine as a wonder cure for dementia and things like that. But there's enough evidence, I think, that the relationship between creating and brainwashing deserves serious attention.

And certain groups may be especially interesting, and that includes older adults can include vegetarians and vegans, like I mentioned earlier, because their dietary creatine intake tends to be lower.

And researchers are also investigating creatine under conditions that may metabolic stress, including sleep deprivation. So when we talk about creating, we should stop thinking about only muscle cells.

Think more like muscle energy. Brain energy. Energy for all the cells of the body. And here's another reason this conversation matters. Our creatine status can be influenced by several things that change as we age.

Older adults may consume less creatine containing foods. They may have less muscle mass available for creating storage. Physical activity often decreases, and the physiological systems involved in producing and starring creatine can change with agents.

So, ironically, the stage of life when maintaining muscle and brain function becomes increasingly important may also be the stage when creating becomes especially important and interesting as well.

This is one reason creating has moved from the world of sports nutrition into the field of healthy aging research, and I think that's an important shift.

We're no longer asking only can creatine make an athlete stronger? We're asking instead, can supporting cellular energy help and older adult maintain muscle strength, cognitive function, and quality of life?

That's a much more interesting question. There's another potential benefit that's getting attention glucose metabolism. Skeletal muscles. One of the major tissues responsible for disposing of glucose after you eat.

That means maintain healthy muscles isn't just important for strength. It's important metabolically. Research has investigated whether creatine, particularly when combined with exercise, may support glucose.

Hadley. And there's evidence suggesting potential benefits, including if that's involving glucose transport into muscles. The evidence is much more convincing for creating plus exercise than for taking creatine by itself.

That just makes sense. So when you use creatine as a supplement only for diabetes instead, I looked at as one potential component of a much larger metabolic strategy that include exercise, maintaining muscle appropriate carbohydrate intake, adequate protein, having a healthy body composition, having adequate and high quality sleep, and other medical management when necessary.

Now, creatine can complement that strategy, but really needs to be a well-rounded approach to glucose metabolism. Again, there are several groups I think should at least know about the research I'm talking about first.

Adults over the age of 50 maintaining muscle and strength becomes progressively more important as we age. Second, women in midlife and beyond, women experience changes in muscle and bone health at aging and menopause, and creating research in women has expanded substantially.

Third, as I mentioned a few times, vegetarians and vegans, because again, creatine is found primarily in animal foods. Fourth, people who exercise and I don't mean professional athletes, of course, that's very much indicated.

And those people. But for the rest of us, if you're doing resistance exercise 2 or 3 times a week to stay healthy, creatine can help support the adaptations you're trying to achieve.

And finally, anyone interested in healthy aging and maintaining physical function should at least understand what creatine does. So what type of creating should you use?

Well, this part is surprisingly simple. There are many forms of creatine on the market. There's creating hydrochloride. There's buffered creatine, there's creatine nitrate, creatine citrate and various proprietary forms.

But the form was the overwhelming amount of research behind it is creating monohydrate. It's the form I generally recommend and it's the form we carry in our creatine wellness, which we get from Germany.

And it's extensively studied. And importantly, there isn't convincing evidence that some types of creating other than creating monohydrate really have any better benefits.

No, most of the research is done on creating monohydrate. So how much creatine should one use? Well, for most healthy adults, using 318 for general health or exercise support, a common maintenance dose is five grams of creating monohydrate daily.

And there's another common misconception. You don't have to do a loading phase. You'll sometimes see protocols recommending around 20g daily for several days to rapidly saturate the muscles, and there really isn't much research demonstrating that this is beneficial.

So for most people, five grams up to ten grams a day is what's recommended for creating supplementation. This is especially true if you're a healthy adult or if you're exercising moderately.

Then five grams of protein is usually the amount that I'd recommend that you use every day. Now, a common question while creating is does it damage the kidneys?

And this is seems to be the one medical concern people have about creatine. And it's understandable because doctors frequently measure something called creatinine when evaluating kidney function.

Now creatine is different. Creatine is eventually converted into creatinine. So if you're supplementing creatine your serum creatinine may increase a little bit.

But here's the key A change in creatinine does not automatically mean creatine has damaged the kidneys. This distinction is very important in healthy individuals to research.

Has demonstrated that the recommended amounts of hydrate do not cause kidney damage. And this was conducted in the research in 2025 with over 600 human studies.

And they found no significant differences in the side effects between creatine and placebo group. So there's a lot of safety data when it comes to creating.

Now, of course, if you already have chronic kidney disease or kidney impairment, then yes, you would not start creating on your own. You'd have to discuss it with your nephrologist or your doctor or your family doctor to see if you're able to use it to any degree.

But for people who don't have kidney problems, don't have any serious health issues. Pre-Teen supplementation is very safe and very effective. People always ask does create an increase fat on the body?

And no, studies do not show that creating causes an increase in fat mass. In fact, when creating is combined with resistance exercise, which is what we're recommending, it actually helps to preserve or increase lean muscle tissue.

Now some people ask about dehydration, crafts, and hair loss. These are concerns sometimes I read about. Well, first creatine has not been shown to cause dehydration.

The research does not support the common claim that treating also causes muscle cramping. And third, there is a persistent internet claim that creatine causes hair loss.

And there's really no good clinical evidence that creatine causes hair loss or volumes. Now, what can cause hair loss is rapid weight loss or extreme diets.

So some people may be taking creatine there on extreme diets, calorie deprived diets, radical diets, they lose hair. It's not because of the creek, and it's because of the type of extreme diet that they're on.

So here's what I find most interesting about creating. It represents a shift in how we think about healthy aging. For years, people viewed muscle as something athletes care about.

Today, we know muscle is central to metabolic health, mobility, physical resilience and independence. For years, people just thought this is something bodybuilders use.

Now we know it's good for aging, for cognitive function, from recovering from workouts, helping with energy levels. Because again, your cells require ATP, your muscle cells require ATP, your brain cells require ATP, and the creatine fossil creatine system is one of the body's mental systems for rapidly regenerating that energy.

And that's why I think creatine is so interesting and to be so helpful for so many people. Well, hope you enjoyed that video. Look for other videos I have on creating and helping to increase energy levels, how to create lean muscle mass.

How to achieve a healthy body weight.