Introduction to Dr. Mary Newport

Welcome back to this episode of the Reverse Alzheimer's Summit. I'm your host, Dr. Heather Sandison. And I just cannot wait to reintroduce you probably to Dr.

Mary Newport. Many of you have heard of her because her husband, Steve Newport, was diagnosed with early onset Alzheimer's at the age of 54 and in 2008, ketogenic interventions, the coconut oil and mct oil and then later the ketogenic diet.

This hadn't even been developed, but Dr. Newport was using this. She was aware of some of the science, and she saw that Steve symptoms dramatically improved and then stabilized for years.

So Dr. Newport is carrying on his legacy as a book author and international speaker on ketones as an alternative fuel for the brain, for Alzheimer's and other disorders.

Dr. Newport's recent books include Clearly Keto for Healthy Brain Aging and Alzheimer's Prevention, and the third edition of Alzheimer's Disease. What if there is a cure?

The Story of ketones. I am just so privileged to have Dr. Newport here. Thank you for being with us. Oh, thank you so much, Dr. Sandison, for having me on this exciting summit.

Well, you really have you know, as I mentioned to our audience, I think it's if not very familiar with you, many people have heard your story.

Steve Newportu2019s Early Alzheimeru2019s Symptoms

And it's really part of where a lot of this started and where people started kind of hearing this viral story of what happened with your husband, Steve.

So would you mind just sharing your that path of caring for him and finding out that he had dementia and what that was like for you? Yeah. Yeah. So I'm a newborn specialist neonatologist and I practiced for 30 years and newborn intensive care units.

My husband, Steve, happened to be an accountant, which worked beautifully for our family since I, you know, only worked in the hospital. I didn't have an office.

And he was able to work from home and take care of our children. So he made it possible for me to be a mother and a physician, which were my dreams. So I owe so much to him and so he was working at home and when he was aged 51, he started having some really strange memory issues misplacing constantly his keys in his wallet keys.

And while, you know, and then he started having problems remembering if he'd been to the post office and the bank and at 51 that really wasn't normal.

And he saw neuropsychiatrist that a psychologist that I'm sorry neuro psychiatrist at that time and he mentioned dementia. The doctor mentioned dementia, but he thought more likely that Steve was depressed and which was one of his symptoms.

That was probably his earliest obvious symptom and put him on antidepressants. But he continued to get worse. And about three years after that, when he was 54, we moved about an hour away so I could open a new newborn intensive care unit.

And he was completely confused about how to get around this very small town. And he would spend endless hours in the garage looking for something, and he sometimes would forget what it was, what he was looking for, and he would keep looking for 4 hours.

And I knew that that wasn't normal behavior. And we had him see a neurologist who didn't did diagnose dementia at that time. He had a there's a mini mental status exam test that has 30 points, as you know, and he scored 23 at that point.

So he already had dementia and he waited another six months, the doctor, to retest him and said he is progressing and I believe it's Alzheimer's disease.

So he was officially diagnosed it at age 54 and started Alzheimer's medications. At that time, we didn't really see any improvement, you know, with the medications, but we were told not to ever stop them, that he could decline more quickly if we did.

So he stayed on those. And by the time he was 58, he had already had to stop driving for a couple of years. He couldn't even turn on a computer, much less do all the work he used to do on a computer as an accountant.

And it was very, you know, worrisome.

Discovering Coconut Oil and Ketones

You know, I you know, we're not going to get to retire together and, you know, live out that old age that most of our grandparents did. So in May of 2008, there were two clinical trials that came to our area for two different drugs.

One was the oral medication, and the other one was a vaccine that would remove beta amyloid plaque from the brain or keep it from further accumulating.

But we were told and we would have to choose between those two drugs. And he was scheduled for screenings two days in a row, two different centers, two different towns.

And we the night before, I thought, I'm going to look for the risks and benefits of the two drugs. And I just happened about a on a press release about a medical food.

It was called AC 1202. At that point. And they had done two trials. They had done a pilot study of about 20 people who on one day took a large amount of MCT oil, medium chain triglyceride oil, and the other day they got a placebo and nearly half of them improved.

Their score improved after just a single dose of MCT oil. I thought, well, that's interesting. And I learned from, you know, a lot of this from their patent application because they didn't really say in the press release what it was or how it worked. And then they did a longer study for 90 days and then some people extended to six months and that held up that almost half of the people had improvement in their memory cognition.

And as you know, none of the drugs claimed to actually improve cognition or memory. They say that they may slow the decline, but they don't ever make claims because they aren't showing improvement in memory and cognition and these studies, you know, for any significant amount.

So I read in the patent application that several things. One, that mct oil was extracted from coconut oil, which I didn't know before, and I was really familiar with MCT oil because I'm a newborn specialist.

We used to add it to the bodies of our tiniest preemies back in the 1980s to help them gain weight, and they'd go home faster. And then they started putting it into infant formulas for premature newborns and for babies that didn't tolerate other formulas.

So I knew what mct oil was. I didn't know it was available, you know, online in which it was at the time and in some

health food stores. But I knew coconut oil was.

And the other thing I learned was about Alzheimer's is a type of diabetes of the brain. So there's a problem. It starts happening 10 to 20 years before you even have symptoms.

And it's a problem. It's insulin resistance in the brain, a problem of getting glucose into brain cells. And all the cells in the body basically need fuel to operate.

Most of the time that's glucose. If you're on a typical diet that's usually higher in carb, a little lower in fat. And so an Alzheimer's source, you know, the problem with insulin resistance and getting glucose into brain cells, so they start malfunctioning, they may go dormant and eventually they may die if they don't get adequate fuel.

So what happens when you consume MCT oil or the medium chain fats that are in coconut oil? Is that your liver converts part of it to ketones? And ketones are an alternative fuel for the brain.

And, you know, basically this was discovered in the 1960s. There were studies of starvation. And they found that that during prolonged starvation, your fat starts breaking down after you use up the glucose that's stored in your body, which happens after about 36 or 48 hours.

And then the ketones, the fatty acids from them can provide fuel to most of the organs, but they don't cross the blood brain barrier. They don't cross into the brain very well.

So the brain needs another source of fuel. However, some of the fatty acids are converted in the liver to ketones, and ketones are very tiny molecules smaller than glucose that easily cross into the brain and brain cells can instantaneously switch over from using glucose to ketones.

So it's a really neat idea. When I read this, I thought, Oh my gosh, this is profound. And so I thought, you know, I'm going to use this idea to help my husband, but at this point, he's getting a screening at 9 a.m.

in the morning and it's about 1 a.m. when I'm reading all of this. I just kept reading and reading and reading and learning as much as I could, so we didn't have time to do anything about it that day.

So we ended up having a day before and the day after we started coconut oil study. I mean, actual studies done and it was, you know, so we went for the first screening.

It was about 9 a.m. in the morning that he was scheduled and he did not do well. He scored only 14 out of the 30 point mini mental status tests and he needed to get 16 to qualify.

We were bitterly disappointed because we'd been waiting for years for any new clinical trials in our area, and he drew a clock. The doctor asked him to draw a clock.

I actually have a picture of it here. Let's see if we can show it there and wow. Yeah, you can see that's just a few little circles and a few numbers.

Right. So there's no circle, big circle for the clock. He has just 11 and 12, not one through ten on there.

Rapid Cognitive Improvements and Follow-Up Testing

And the circles that he's drawn are you wouldn't associate them at all with the clock. Right. So he's clearly spatially very disorganized. Very disorganized.

And the doctor told us that he was on the verge of severe Alzheimer's. And functionally, that's what I was seeing, too. So I was surprised and yet not surprised.

And so I thought, I'm going to we'll pick up some coconut oil on the way home. So I had seen it in health food

source. You know, I was taught medical school, it had artery clogging fat.

And I thought, why is it in health food stores? But we went and bought some. And when we got home, I looked up again, you know, reminders about what our medium chain triglycerides msi2 is.

And I was able to find the fatty acid composition of coconut oil. And I learned that it was about 66 0% medium chain triglycerides. So I did a calculation and I arrived at Yeah.

To try to figure out how much to give him that would be equivalent to what was in the medical food, which was 20 grams of MCT oil. It was a real specific medium chain triglyceride called C8.

But coconut oil has several different medium chain triglycerides and I arrived at 35 meals, which is a little over two tablespoons of coconut oil to try to equal this medical food.

So the next day, he was going to be screened again, but not till one in the afternoon. And the timing was also fortunate. The way it came together was just unbelievable.

But I gave him a little over two tablespoons of coconut oil with breakfast that it's kind of semi-solid at room temperature. So I put it in some oatmeal.

You know, mixed it in. I took some to I thought, I'm not going to make him take anything. I won't eat. I got indigestion, I have no gallbladder. So I've adjusted to that since then.

But and he did fine with it and we went for the screening and about probably about 4 hours after he ate that and he improved by four points. And the points that he gained were we were in a different location, a different day, and he knew the day of the week, he knew the city we were in the floor in the facility were in in the season.

And those were fourth points that he did not get the day before, which was really remarkable. And so he qualified for the study and, you know, at the time I thought, oh, my gosh, is this for real?

You know, was it just good luck? You know, it could have just been good luck or. Good days and bad days, you. Know? Yeah. Was it prayers? Was it really this?

And I thought, well, I'm going to assume that it could be, you know, this idea of using medium chain triglycerides for ketones and keep doing it. So I've just I kind of found every cookbook we went to health food stores, got more cookbooks on coconut oil and online recipes and just try to learn everything I could about ketones and this whole idea of ketones as an alternative fuel for the brain.

And he got better every day and we saw improvements that were pretty dramatic just even over the first four or five days. And he would in the morning he had been before this very sluggish.

He couldn't finish a sentence very not talking very much. He couldn't pick out the right utensil from a drawer. If he was going for a spoon, he'd come back with a knife and that type of thing.

And all of that improved. He had tremors like his hand when he would eat. He has him a tremor in his job, a tremor, what he taught. And that stopped very quickly.

And he started whistling again and telling jokes again. And, you know, and he had been very depressed all through this. And he knew he had Alzheimer's.

He was one of those people who knew it. He accepted it that something was wrong. And he told me that he he felt like a light bulb came on in his head the day he started the coconut oil and his mood lifted.

And he he started expressing that he had hope for a future, that maybe he wasn't going to die soon after all. And it was just remarkable. And, you know, over the next couple of months, by two months, he could tie issues again,

which I had to do for him.

He started walking normally. He had like a stiff shuffling gait. And it turned out he also had Lewy bodies. Lewy body dementia and and just completely normal eyes.

He could pick up a state and run again after about two months. And then at about three and a half to four months, he announced one day that he could read again.

He hadn't been able to read for about a year and a half. And I said, Well, why couldn't you read? And he said that when he would look at a page that the words what he described to us going into pixels like satellite break up, he said he could actually tell me satellite radio, you know, at that point and that the it would move around on the page and that that had stopped and he could actually read the words again.

And a few months after that, he could comprehend what he was reading better. And then he could tell me a few hours later in the day, this is around nine or ten months.

He could tell me details from things he had read earlier in the day. So it was really dramatic and it was very steady improvement for the first nine or ten months.

And then he kind of leveled off after that. And a lot of things happened in between. There. He did get into actually both clinical trials. He went back and when he tested for the other one, again, he got 20 points.

Yeah. So it went up even more and he did get in a clinical trial and then we found out that he was on the placebo. Later we found out for 18 months he was on placebo.

So the testing that he had, you know, during that that time reflected really the only other difference we had made, which was this dietary intervention with, you know, these oils.

And I started adding MCT oil after about six weeks and I kept the coconut oil because I thought there might be something in it that's important. And it turns out that there is there are things in it that are important. And and then about two years later, he got I had made a connection with Dr.

Richard Beech at the NIH, who was developing a ketone Ester. He was a world expert on ketones at that time. And I talked to him often and he would send me papers and he was really interested.

He became especially interested after Steve drew his second clock. And this was two weeks after. So I'll show you. Wow. So now there's a full circle. There's more numbers in there.

It's messy, but. And they're in order. Yeah. Yeah. And he's starting to put basically hands on the clock or and try to put the numbers in the right position.

And this is at about, let's see, 37 days after.

How Coconut Oil and MCTs Work

So it gets a little cleaner. It's a little bit cleaner. Yeah. And then he told me later the lines. I thought they were hands with the clock and he said no, he was trying to line up the numbers and across from each other.

Those were guiding them. Yeah. So, so Dr. Beach, when he saw that clock at two weeks compared to the first, he started taking it very seriously. And he told me he thought it would require much higher levels of ketones to have any improvement in somebody with Alzheimer's.

And he measured Steve's keto levels and they were, you know, quite low. I mean, but the ketone Ester, many people won't know what this measurement is, but you can get a measurement of beta hydroxybutyrate, one of the ketones of five milli moles.

And with coconut oil it's about 0.3 millivolts, so much less. Dr. Newport, there are so many directions I want to go right now. I mean, you get a really unique experience.

The people down here give her a doctor and this investigator you're just a description of that night where you were diving into what could potentially help and understanding these two clinical trials.

You went and read the packet. Yeah. Not many people would do that. And you've basically taken this entire experience with Steve to dove very, very deep into the research into what people are understanding, so that you can really understand the biochemistry and what's going on.

And so I want what I really want for our listeners today is to understand the takeaways. Excuse me, I'm so sorry. I would normally mute myself if I had a patient.

So sorry. But what it what you just mentioned that coconut oil is a really there's important components that you don't really want to separate out the empty TS.

And so let's just go there. Let's start with that question. Okay. So what would you recommend people who are noticing cognitive decline like what? Miller Moles per liter do you want people getting their ketones at and what what is effective and how do they get them?

And with what what do we take? What do we eat? What are we taking? It was all kinds of things that you can do. So starting with coconut oil, because that's what we started with.

So, you know, basically I suggest people start with like a teaspoon two or three times a day with food and because not everybody is as lucky as we were and some people are so sensitive to these oils that they will end up in the bathroom having diarrhea and it could be explosive.

You know, if you take too much, too fast. And it's even more so likely with MCT oil there for people that aren't accustomed to it. So but then to try to work up to at least like four, maybe 4 to 6 tablespoons a day, if you're somebody that has cognitive impairment.

And for prevention, I mean, there aren't studies yet because you need studies that last year, you know, to be able to say that something might prevent cognitive decline, you know, but it's reasonable to think of what help somebody who has cognitive issues that it may potentially potentially, you know, prevent it or maybe slow down the delay at the onset.

Or do you think that someone who is looking to optimize cognitive function, that it could help them? Oh, yeah. There's actually a study in Australia and they used an oil that's a combination of the main fatty acid in coconut oil, which is lauric acid.

It's about half of coconut oil combined with the other machetes. And they did this in healthy people. They were planning, they were getting ready to do an Alzheimer's study, but they did a pilot and people who were older but cognitively normal.

And even those people improved cognitively when they took it. So it could help optimize your cognitive abilities, memory and that type of thing. And so you said 4 to 6 tablespoons per day of coconut oil.

It was cognitive impairment. And so then for like prevention, optimization, what are we thinking? What's the dose of 2 to 3 tablespoons a day? And it could be you know, just coconut oil, just mosquito oil or a mixture of the two.

And my husband actually worked up, you know, I in the beginning, I thought, you know, is one dose enough? And when I read this patent application, the ketone levels peaked at about 90 minutes on average and they were back to baseline at 3 hours.

And I thought, well, what does a brain do the other 21 hours? Because the brain is so active, it constantly needs

fuel. Even when we're sleeping, it's very, very active.

So I started giving it to him for lunch and dinner and then eventually a fourth amount before, in the evening, before he would go to bed and he started sleeping better.

He started remembering dreams and he would tell me about, you know, that type of thing. And he worked up to usually between nine and 11 tablespoons a day.

So this is a lot. And he had also reduced the carbohydrate. He started gaining a few pounds. And that well, if you just add that much oil to your diet, don't subtract anything.

You're going to have a problem, you know. So we started substituting it for other oils and fats and we were already doing a mediterranean diet for a couple of years at that point.

So a little less olive oil and a little more of the coconut oil, that type of thing. And then he just started cutting out a lot of carbohydrate. He very voluntarily he would just leave at first the rice and the bread and the pasta.

And then he wasn't eating nearly as much fruit. And we started focusing more on berries, which are lower in sugar. And they've got a lot of potential health benefits themselves.

What we read. And so he was effectively on a ketogenic diet and we didn't have the, you know, the whole beta weren't available that I know of to be able to measure ketones at that time.

But, you know, I'm quite sure that he was on a pretty significant ketogenic diet with that amount of fat in his diet. But, you know, the coconut oil has some other interesting things in it.

That and this is why I always kept coconut oil. The Lauric acid that I mentioned is half of the fat and coconut oil. It's a medium chain fatty acid. It's kind of right on the verge between a medium and a long chain in the type of properties that it has.

But it has a couple of interesting properties, and one of them is it's highly anti-microbial. It kills so many different types of viruses, bacteria, protozoa, fungus.

And it's used like if you ever got a white or a spray that says it's antiviral, you know, it has sodium lauryl sulfate. The laurel is from lauric acid from they actually separate these fatty acids and coconut oil and they sell them for uses as surfactants and as anti microbial compounds.

And so the sprays and wipes actually contain it and it's active against many different organisms that have been implicated as possible causes or accelerants or triggers of Alzheimer's.

We're talking herpes simplex virus, which causes fever, blisters. A lot of people are dealing with those chlamydia, Lyme disease.

Recommended Dosing and Ketone Targets

You know, there's a spirit kid that's in the same family as syphilis, which is known to cause dementia if it's not treated and fungi, candida as a common, you know, fungus that it kills and it kills dental pathogens.

They've been associated with Alzheimer's disease, you know, so the coconut oil, you know, with the lauric acid is beneficial in that way. Most of the MCT oil products have no or minimal lauric acid in them.

And the other interesting thing, a group in Japan was very interested in how my husband could improve so much with the low ketones from coconut oil and so they they studied it and they used cultures of astrocytes, which are basically for those who don't know, brain cells that nourish the other, you know, the major neurons in the brain. And they study these in cultures and they found that lauric acid potently stimulated ketone production directly in the

astrocytes.

So it might not be to the blood level so much. It may have a more direct action in the brain and they still have to show this and, you know, like mice or something, too, to prove it.

But that it's it could really explain why my husband could improve so much, you know, so quickly, you know, with it from the fuel aspect of taking ketones so that yeah.

So those things and then there are just a whole bunch of polyphenols and other compounds in coconut oil that are anti-inflammatory and antioxidants and there's a lot of neuroinflammation inflammation in the brain and people who have Alzheimer's disease as well as a lot of other neurological diseases, Parkinson's, multiple sclerosis, ALS, you know, those epilepsy, psychiatric disorders, even, you know, depression, anxiety are they're being studied now.

And many people reporting improvement with the ketogenic diet. So seizures, seizure disorder. And so that's where a lot of this came out of, especially in children.

Yeah. Has been used for a hundred years. The ketogenic diet over 100 years for successfully to stop seizures or greatly reduce seizures in children that don't respond to drugs.

Right. So that. Results to. So much potential benefit here. Now, if someone is considering doing this, the downside is pretty low. You mentioned diarrhea as one of the risk factors, cholesterol.

Can we talk about someone asking, hey, I have high cholesterol. My doctor's worried about it. I'm even maybe on a statin. Is this a contraindication for me?

Well, that's a little bit of a complicated question, but it's it's a common question that I get all the time, because there is this myth that coconut oil increases cholesterol levels.

A lot of the real early studies were small studies that were done with hydrogenated coconut oil. And any hydrogenated oil will increase your cholesterol level.

Even polyunsaturated fats that are subjected to hydrogenation. They create all these trans fats and they'll increase cholesterol levels. There's a whole collection of coconut studies that were done between about 1985 and 2018.

You know, so there are, you know, few decades old, some of them and fairly recent and they're almost always comparing coconut oil to other oils. And they use coconut oil because it's high in saturated fat.

And the others they're checking are usually olive oil, which is a mono unsaturated fat or polyunsaturated fats. So we always hear we should replace saturated fat with polyunsaturated fat.

They've been telling us this for decades. And but, you know, coconut oil is most of the saturated fat in coconut oil. About 70% of it is the medium chain triglycerides.

And those are not present in any of the other common oils that we know. People eat. It's not like soybean corn oil, olive oil, fish oil. You know, these medium chains are not.

And these other oils and and the actual saturated fats, the long chain saturated fats, the coconut oil has about 11% of those. And these other common oils also have they all have saturated fat, and they have somewhere between about 11 and 14% of these long chain saturated fats.

So coconut oils actually in the same range of long chain saturated fats as the other common vegetable oils and medium chain triglycerides. They're either converted to ketones or they're used directly as fuel.

They're not stored as fat. And when you just take MCT oil, you know, most of the studies show that there is no increase even with like six month use of MCT oil.

In a study like people that have mild cognitive impairment, there was no increase in their cholesterol levels. So the medium chains don't do that and so I actually got a group there was there were about 16 studies that were done between 1985 and 2018.

It had a total of about 100, 525 people in these studies. And, you know, they in the reports, you know, they were comparing coconut to the other oil, you know, what was the relative difference in the cholesterol levels?

And I wanted to see well, what was the actual difference in the groups that took coconut oil from their baseline levels to the end of the study? And when I combined these 525 people together, there was actually almost no difference at the end of their studies for the cholesterol levels.

Now, where there was a difference were in the very short term studies. So these were studies that lasted like 3 to 6 weeks and there was an adjustment period some of these studies had they would take like a teaspoon of coconut oil.

Other studies, it was several tablespoons a day. So there was a real variety of the amounts people were getting. But even the studies themselves, the individual studies, there were some where the average cholesterol level went up and we're talking LDL and total cholesterol.

Sometimes it went up and some studies average was the same. They didn't change and others that actually went down even in some of these short term studies.

So they were all over the place and. Go ahead. Yeah. And so the short term studies on average there was a little bit, but it was less than 5% difference when you added all the people that were in the short term studies together and and the medium term studies which were like 8 to 15 weeks, there was virtually no difference.

It was within about 1% of the baseline for the total and the LDL cholesterol.

Cholesterol, Statins, and APOE4 Questions

And, you know, for, you know, like I said, about ten long term studies. The interesting thing about the long term studies, because you asked about people on statins and they had really interesting results.

This was the biggest study. There were 200 people in the study. 100 of them were taking coconut oil and it was for two years. And they were people that had all had some kind of adverse cardiac events and they were on statins, all of them.

And at three months, one year and two years, their levels were almost identical to their baseline level. You know, when they were taking they were taking about three tablespoons of coconut oil a day or and then the other group was taking sunflower oil and they, you know, at the end of the two years, they were basically almost identical, the results, you know, between the sunflower and the coconut oil.

So it was very interesting, you know, so but it's hard to convince some cardiologists. It's for people with APOE e if they have a for a three, four, for four and if they have one or two copies of the four, do you see that that makes a difference because of this kind of dysregulated lipid metabolism?

In theory, it should. And I was worried because my husband was three four. He had a before he was three four and he responded, you know, when they read the patent application, they in these early studies of, you know, the eight medical food, they found that the people who were able to for it didn't seem to on average again respond.

But I spoke with one of the authors and he told me, well, that was when they added everybody up, but they did have people who were before that did respond.

It's just when they average everybody together, it looked like they didn't respond. Interesting. And so they may or may not not. And I wish they had put that in the articles, you know, that there were people that did respond.

You know, that's important because I think a lot of physicians and other people that, you know, dieticians have seen that, you know, suggestion that people with ability for might not respond and don't recommend it.

But there are individuals that do. And my husband was clearly one of them. And then there's another study, too. I'm Dr. Steven Koonin. He studied 65 people with mild cognitive impairment for six months.

And they were taking oil and he found no difference between the people taking a huge hit. AP For, you know, versus those that didn't see. Published by prolifically on ketogenic diet for for brain health.

And it's consistent with our experience too with clinical trial we did in my office, we had quite a number of people who were able to eat either three or four or four, four, and some of them did respond.

Now, there were some that didn't, but we had we had great results and we did not tell them to avoid coconut oil or saturated fat. In fact, we encouraged all of them to get it into a ketogenic diet and include those.

So that's interesting. And it seems like the APOE4 status doesn't determine it doesn't seem to determine whether or not your cholesterol will go up. We we have found that people mostly their cholesterol got better as they got into ketosis, especially as you mentioned when we looked at six months, it was more likely that their cholesterol had improved compared to baseline.

Then when we looked at 12 weeks even. Yeah, yeah. With my husband, his triglycerides were always very low. You know, while he was doing this 60 or 70, his HDL went up dramatically.

And in this this this group of studies that I looked at all but one of the groups had an increase in HDL cholesterol, and it was more than in any change in the other had a total or LDL cholesterol.

But so he always had an HDL that would be like 60, 70, sometimes 80, you know, which is getting actually quite high. And his total cholesterol, he was on a stat when we started this.

But after reading about statins and sweating bullets, I thought, you know, he'd decline quite a lot during that five years that he was on them. They weren't helping them, clearly, and they weren't preventing Alzheimer's for him.

So we decided to stop it. And at first, you know, you as expected, his LDL cholesterol went up, but then it just slowly started coming down and eventually he came down to below like a total cholesterol of 200, under 200, I think it was 194.

And his LDL became normal as HDL always stayed up and his triglycerides were always very low in spite of the huge amount of fat that it was seeing. So, you know, every person's different.

And I think people that are really worried about it, it might be a good idea to monitor it. Some people might still be really leery of taking coconut oil itself, but I sometimes will suggest that people take a high lauric acid oil and there are a couple of them out there, several of them that are out available here in the U. S.

and one has about 12 or 13% lauric acid as opposed to 1% and the usual active oils. And there are two brands that have 32%, Lauric Acid. And they're clear.

They're perfectly clear and colorless, odorless. They have the other MCT eight and C ten and are cooking oils. You can low heat with them. But the what I think of it as that they've taken the heavier fats out of the coconut oil, they've moved the heavier saturated fats and it just stays completely clear at room temperature and you can use it in almost any food.

You can cook with it at low heat and it won't harm the oil as long as it doesn't smoke, the oil would be okay. And so that product that they used in that study in Australia that I mentioned earlier, where the even the healthy cognitively normal people improved, it was that oil that was Lauric Acid, MCT oil.

And do you mind sharing the brand because I know people are going to be asking yeah. If they yeah I'm allowed to do that, I will certainly do that. So that the one that has about 11 to 13%, Lauric Acid is called Carrington Farms, liquid coconut, cooking oil.

And then that too. There are two brands that have 32% Lauric Acid and they're on it and I t and the other one is Sports Research, M. S. T And Sports Research has a 68 C ten and then they have eight C, Tennessee 12.

So you want to look for the one that says CHC ten and C 12. And I just happened to be looking at those yesterday. They have 128 ounce jug of it that is really relatively inexpensive.

I mean, I think it's 256 tablespoons of it that are $88. And that sports research, when it's organic as well. It is, right. It's a classic. Yeah, that's great. And this too.

Many people will start kind of going in this direction and if it's their first time getting into ketosis, especially their testing, we always aim for one minimal and at least some point in a 24 hour period.

Many people kind of struggle there and they get 2.4, they get 2.6, and they're frustrated that they're not getting higher. Is there an other are there other factors when it comes to getting those blood ketone levels up and different lifestyle strategies that can be used to increase that number?

Well, I think, number one, trying to reduce the carbohydrate in the diet and there's a study that's well, it's going to come out fairly soon. Oh, I don't know.

But but they basically reduced the carbohydrate in half. And people who are in assisted living facility, residents in assisted living facility, and they found that it reduced their total blood glucose area under the curve of the blood glucose by about 40%, just cutting their carbohydrate in half.

And this was about 130 grams a day of carbohydrate. You know, so I'm aware of this and I know that this will hopefully get published during this next year. But if you eat carbohydrate and MCT oil, it's not as ketogenic.

It doesn't increase ketone levels as much as if you eat a low, you know, a higher fat, low carbohydrate meal, you know. So that can make a big difference in whether or not you can get a hierarchy to a level.

Do you think there's a risk in in raising your fat without reducing your carbohydrates? Probably not, except that if you think about, you know, that we're dealing with insulin resistance in the brain, the longer you keep eating a higher carb diet, a lot of simple sugars, ultra processed foods, the more likely that process is going to continue getting worse.

Fasting, Carb Reduction, and Metabolic Flexibility

Insulin resistance, you know, so, you know, chances are it may continue to progress. So I think reducing, you know, the sugar and eating more complex carbohydrates, what they call low glycemic carbohydrates.

So whole grain instead of refined flour, you know, in the various foods, whole grain rice instead of white rice, you know, things like that can make a difference because your blood sugar doesn't go up as much and your insulin levels don't have to come up as much.

And that seems to be the problem over time that you're constantly spiking your blood sugar up and your insulin levels up. And that seems to be associated with developing insulin resistance over time.

So I do think it's really important to I really encourage people that eat a whole food diet as much as possible. Whole foods stay away from ultra processed foods and try to, you know, reduce, take, get rid of the sugary beverages completely. They yeah, they've actually been shown to accelerate atrophy of the brain and and this is just in regular people this is in people that have Alzheimer's already.

And to age, you know, you know, basically affect memory much sooner, you know, so your brain, age, memory wise, maybe 13 years older than you are if you're drinking, say, two or more sugary beverages a day, I think a three or more beverage a day.

And what about the diet versions? The diet didn't have that affect the diet person, but with the sugary drinks, they were even talking about 100% fruit juice.

Oh, wow. Yeah. So not just soda and juice. And of course, sodas, you know, soda pop or whatever you call it, wherever you live. Well, perhaps on intermittent fasting or fasting generally.

That's a perfect strategy, too. That's another good one. Like people that have had some of the best long term success have, you know, a lot of them started with coconut oil, added MCT oil.

Then they thought, okay, I'm doing better. You know, what else can I do? You know, and, and, and then reducing the carbohydrate. So that's kind of a next step a lot of times.

But another easy thing to do, I think it's easy is doing overnight fasting. And the one you do this for at least 10 to 12 hours, your liver's depleted of glucose, the stores in your liver are depleted and that you do start breaking down some fat and you will start making some ketones at that point.

So you can start the morning in ketosis. So you stop eating at 8 p.m. and you don't eat till at least 8 a.m.. That's swab hours, so you'll wake up in a little bit of ketosis.

That might be a level of point three or point four, something like that. And then what a lot of people do as they have their morning coffee or tea with coconut oil and or MCT oil in it and that's further it doesn't stop your ketosis, it actually enhances it.

So you're ketone levels will keep going up and then that is often enough to keep you not from getting hungry for another few hours, you know. So a lot of people extend that to 14 and even 16 hours and then have their first meal around lunchtime, you know, say around noon or so, they'll have their first solid meal. And and then, you know, just basically limiting the portions of carbohydrate.

I don't think you have to I don't know. I think it's unreasonable to think that somebody for their lifetime is going to be able to completely eliminate bread and rice and pasta and all that, you know?

So I suggest to people an easy way to kind of cut it down is to take your usual portion and cut it in half. And then when you get used to that, cut it in half again, then you still have a few bites, at least.

You know, it might be a quarter cup of of whole grain, but to me, the first few bites are the best, right? You know, if you like that kind of food, you know, just have a little bit of it.

You know, it might be ten or 12 grams of carbs. And if you stay under about 50 or 60 grams of carbs a day, most people can be in ketosis at that point.

And the more fat you eat and the less carb you eat, the deeper into ketosis you will go, the higher your ketone level will go. That seems to hold up pretty well, you know.

So the people that are struggling, you know, to get to one milli meal at some point in the day, if they just cut their portions of carbohydrate even in half, and then maybe in a quarter, again, they might find that they're getting better results.

We also find that logistically, people travel, they have birthdays and weddings and celebration and holidays. And so, yeah, I often will recommend and I am wondering what you think about the benefits of metabolic flexibility of going back and forth between burning carbs for fuel and burning fat for fuel, being in ketosis and maybe even planning for that and saying, hey, I'm going to be on a trip, I'm going to eat mostly whole foods, be in glycolysis, be

burning sugar for fuel, and then I'll go back to ketosis.

Do you think there's even maybe more potential benefit from that or better to stay in ketosis? Yeah. I don't think it hurts in the long run. And there could be benefits.

I mean there is a couple of papers about metabolic flexibility and advantages of going between, you know, being primarily fat burning to glucose burning and so, you know, there could be benefits to doing that.

And I, you know, I personally I take a break here and there. You know, I've been on, I guess, a very low carb diet, but we started Mediterranean diet in 2006 and that already reduced the carbohydrate a lot.

And it cut out all the you know, the simple sugars, you know, basically more a low glycemic diet. I lost a whole lot of weight. My husband, I don't know, he kept it, you know, progressing and Alzheimer's did it slow it down? I have no idea.

You know, you can't tell, you know, just from one person's experience. But I had tremendous benefits from it. I quit craving carbs all the time. You know, I was always thinking about my next meal and that went away after about three days. And, you know, so I've had a lot of benefit from it.

I felt like too. And then when we had the coconut and MCT oil, I felt like I had better mental endurance. You know, I could read and read and read and, you know, I was writing to people constantly, you know, trying to get this out, politicians and media people and everything, you know, early on, trying to get this information out to increase awareness and but, you know, I think that, you know, combining those two things and you can take a break, you know, here and there, you know, it doesn't have to be for the rest of your life.

You know, during the holidays, it's really hard. You know, you go to parties and you want to enjoy some of the other foods that people are having and just try to, you know, keep the other meals and just get right back to it.

Keep your other meals, lower carb and higher fat and no, and then just get back to it as soon as you can. And it's kind of surprising like in there in the beginning.

A lot of people, though, have go through a period for a few weeks where they don't feel good when they first go on a ketogenic diet, especially if they really try to go low carb like under 20 carbs, grams of carbs a day.

You know, they'll feel lethargic and their muscles will ache. It's almost like they have a flu. They call it the keto flu, even though it's not infection.

But that feeling passes after a little bit. But you can ease into it, too, by just reducing the carbs like we talked about, you know, half size servings and then quarter sized servings just to get into it and then, you know, maybe aim for staying under 50 or 60 carbs a day.

And that turns into a reasonable diet that I think people can sustain, you know, for nearly every day, you know, for the rest of their lives. And we find that, as you well know, Alzheimer's is a disease that affects women more than men.

They're two thirds of the Alzheimer's patients. And when they're not the patient, they're the caregiver. And so women, as they age, we worry about frailty.

If someone is concerned about losing too much weight, what advice do you give them? I advise them when I talk about planning a ketogenic diet or a low carb diet, I talk about paying attention first to how much protein you're consuming to make sure to get adequate protein.

You know, I did for a while. I did hospice care and I did home health visits and some of the very frail elderly women that I would meet were eating only a little bit of soup, you know, at their meals.

They clearly were not getting enough protein. And they were you could just see the muscle wasting and the frailty there. And so it's really important at any age to get adequate protein and this will help maintain your muscle mass over time, you know, and then that combined with exercise, the right kinds of exercise, aerobic exercise doesn't build up muscles so much, but resistance type of exercises.

And then my the one book that I have to clearly, kiddo, that you mentioned, I have a set of exercises. My sister was the model for it. And I do this every single day.

And because one type. Yeah, yeah. And it's just really simple exercises.

Protein, Exercise, and Maintaining Muscle

One are squats, which might not be so simple when you first start out, you know. So if somebody has balance issues, you can stand next to your kitchen counter or have a chair behind you, you know, in case you're worried about losing your balance.

But you just, you know, you just well put your arms out and you just kind of slowly come down a bend at the knees, kind of like you're going to sit in a chair and then you come back up again. You're just up and down.

And some people might only be able to do three or four, you know, in the beginning, but, you know, try to work up to maybe ten or 12 at a time. And I do three sets of 12 every single warning.

You know, the last couple of years I've been doing this and then, you know, regular push ups are hard, but push ups against a wall can be really effective in maintaining the strength and your arm muscles, you know.

So something called push ups, you stand a couple of feet away from the wall and then just, you know, come towards the wall. And it really uses all the muscles in your arms and shoulders to do that.

And another one is a wall plank where you go towards the wall like you're going to do a push up against the wall, but then you freeze and you just try to stay that way for as long as you can.

It's really surprising at first it might be ten or 15 seconds and you can't stand it. And I do like 30 seconds three times. I do this little series of exercises with the squats, the wall, push ups and the wall planks.

Every it takes maybe six or 7 minutes. And I just decided I'm going to make a habit. It started with the pandemic, you know, because, you know, I was going to the gym taking advantage of Silversneakers and pulling the weights and all of this.

And then we couldn't, you know, they were closed and we really couldn't do it. So this was a routine I got into to replace that. And and now I do try to go to the gym and use the machines a couple or even once a week can help maintain muscle mass, you know, so resistance exercise combined with getting enough protein and like enough protein, if you have a way to look up the grams of protein like in the foods that you eat, it kind of helps to write them down.

And Amy, for like a half a gram, what I suggest is a half a gram per pound that you weigh per day, you know. So if you say you weigh £150, that would be 75 grams a day of protein that you would aim for.

And a few some easy farming cottage cheese is a real easy way to get a good amount of protein like a as a snack or as maybe a lunch or something. And Greek yogurt is loaded with protein.

That height that I do, full fat, you know, full fat cottage cheese or Greek yogurt don't mess with the fat, free or reduced fat. There was a study of like the earliest processed foods, you know, as I hear you talking about even just how they set this study up, we we tend to overcomplicate things.

And I think your story is this great illustration of trusting your own experience. But yes, look look to the science and

you have done this incredible deep dives into the science and understanding the biochemistry and all of that.

And I that and yet you double checked it with this direct experience that you had with your husband and then seeing that that led to this incredible improvement, you double clicked on it over and over and over again and kind of continue to go back to that.

And it just is such a gift to all of us and I'm so inspired your doctor knew just how you've taken this tragedy, this personal tragedy, and really created this this very meaningful and passionate career around.

I mean, you were presenting at the Alzheimer's Association meetings this year, and I got to meet you in Las Vegas at the forum meeting where you were presenting.

And you I mean, your passion and dedication, your I don't know how you keep up with it all. It's so impressive. It's tiring. And there isn't a day that goes by that I am not thinking about Alzheimer's and working on this, you know, reading and writing, you know, pretty much every day.

And but my alternative, you know, I'm starting 72 in a couple of weeks, you know, and I could just enjoy the rest of my life and watch television and only go, I mean, I still go out with my friends here and there and I watch some television in the evening, you know, but I just kind of fill up my day with this kind of thing.

And it's just a compulsive experience that first day. You know, when Steve started having, he had an improved score, you know, after expecting, you know, it hasn't stopped.

You know, I at the time, I felt like if he improved, other people would improve. And at that point, they were saying there were 35 million people in the world with dementia.

So that was a lot of people that try to, you know. Get the message out to And, yeah, so that's kind of where it started. And it's the message is getting out, but it's not out there wide enough and it's not recognized yet, you know, by the Alzheimer's Association, for example, they've actually sponsored studies now.

I couldn't get through to them then. I couldn't convince them, you know, that they should even ever mention this to anybody. You know, it's it's only a food.

Closing Thoughts and Resources

It's not a harmful drug with a lot of potential toxicities that we're talking about. But they, you know, talking with their medical directors, they just weren't interested in acknowledging it at all.

They wanted it to be studied first. I told them, what? You're the people that are funding the studies, you know, but eventually they did. And starting around 2017, there have been several sessions on ketones, sometimes more than one each year, you know, at their international conference, you know, that has about 5000 people, physicians and researchers from all over the world that attend this. And they they've had the results of the studies presented at their conference.

Yet they still if you look at their website and you look up coconut or MCT oil, the last entry they have is from about 2014 and it says, well, this hasn't been studied yet, so we can't advise it.

And it's like, wait a minute, you funded it and you let people presented the the good results, you know, at your conference. Why aren't you making people more aware of this? So, I don't know, just can kind of get the right people, but so I've kind of been taking the grassroots approach for a long time.

Giving people the information that they need to potentially make some changes that are safe and effective at home. Dr. Newport, thank you so much for all that you do.

We all benefit and I have certainly heard from patients who have heard about you and then started doing the

coconut oil. And as we mentioned, there's sort of this layering effect, right?

They get into the coconut oil or the MCTs first and then they start cutting out carbs and then they end up reading Dr. Bredesen's book. And then they come into my office to do the testing and they get better and better and better.

Yeah, sometimes people plateau, but I am sure in many, many cases we're reducing the suffering associated with dementia by delaying or stabilizing. And then hopefully with many people even reversing, as Steve did, it's just such a privilege to be here with you today.

Thank you so much. I really appreciate you allowing me to come on and help spread this message to more people. And if people want to learn more about you, I do.

You have a website where they can get your books or learn more about where you'll be speaking next. I sure do. They're all available on Amazon and a whole lot of other bookstores.

If you look up my name, you'll find them all. Those are a couple other Mary Newport's on there, so mine are about Alzheimer's or ketones, but my website is coconutketones.com C O C O N U T K E T O N E S.com There's no Y in ketones.

Thank you so much again. You're welcome. You're welcome. I really appreciate it. Thank you so much.