Nutrient Deficiencies: The Hidden Root Cause Starving Your Kidneys and Accelerating Disease Transcript

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Introduction to Kidney Nutrient Deficiencies

Her kidney. Doctor was shocked because, as he put it. Kidneys don't get better, but they actually can. When we give them what they need. So let's start with vitamin D, one of the most crucial nutrients for kidney health.

That goes far beyond its traditional role in bone health. Research shows that vitamin D deficiency is not just a consequence of kidney disease. It is actually a contributor to its progression.

This deficiency is extremely common in CKD patients with steady showing prevalence rates of up to 80 to 90% in advanced stages. Welcome to Doctor Talks, the podcast, where every episode leads to a healthier you.

Join us as we navigate the world of optimal health, uncovering groundbreaking strategies to conquer chronic disease. In each episode, we'll bring you the latest insights from leading health experts, medical innovators, and wellness warriors.

If you're seeking to transform your health journey, or if you're looking for answers to burning questions, you've come to the right place. Get ready to unlock the secrets of lifelong health and vitality.

This is Doctor Talks, real talk from real doctors on the issues that matter to you most. Welcome to wellness. Focus the doctor this my Friends podcast.

I'm Doctor Beth, my friend, a functional nephrologist and founder of Kidney Institute. Today we are diving into a topic that's rarely discussed in kidney clinics, but could be the missing piece in your kidney health journey.

Nutrient deficiencies and their profound impact on kidney function.

Vitamin D and Kidney Protection

This topic matters tremendously because many people with kidney disease are literally starving the kidneys of essential nutrients needed for repair and optimal function.

What's worse, that this is happening despite eating regular meals and even taking supplements? Because not all supplementation is created equal and absorption is a complex process effected by many factors.

I remember this patient who came to me around 58 years old with stage three kidney disease. She had high blood pressure, and her kidney doctor basically said that we cannot really do much besides controlling her blood pressure and waiting to see if her kidney function is declined further.

Despite being health conscious and following a so-called kidney friendly diet, her kidney function had steadily declined over few years. When we ran her comprehensive nutrient testing, not just a standard blood test, we discovered severe deficiencies in her white mehndi, magnesium and several b-vitamins.

After three months of targeted supplementation and dietary modifications to address these specific deficiencies, her kidney function improved by 15% and energy levels were very high.

Her kidney doctor was shocked because, as he put it, kidneys don't get better, but they actually can. When we give them what they need. So let's start with vitamin D, one of the most crucial nutrients for kidney health.

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consequence of kidney disease. It is actually a contributor to its progression.

This deficiency is extremely common in kidney patients, with studies showing prevalence rates of up to 80 to 90% in advanced stages. When your kidneys lack adequate vitamin D, several damaging processes happen.

Increase inflammation white women deregulate immune function and suppresses inflammatory pathways. It has also been shown to be implicated in decreasing the protective protein like Clotho, which is vital for kidney protection, and it has also shown that it impairs site health.

These specialized cells in the kidneys, filtering units that need vitamin D to maintain the integrity.

Magnesium Deficiency and Testing

Studies have shown that maintaining a 25 or high vitamin D levels above 30 is associated with slowing down kidney disease progression and better survival outcomes.

This isn't just a statistical correlation. White women directly influence the systems that control blood pressure and fluid balance in the kidneys. Next, I want to talk about magnesium, which is a critical mineral for kidney protection that's chronically depleted in our modern world.

Magnesium deficiency affects around 75% of Americans, but is particularly problematic for kidney health because it protects against calcium phosphate crystal formation, which can damage nephrons, which are the kidney cells.

It also helps regulate calcium balance, preventing accumulation in kidney tissue, and it supports proper detoxification pathways and energy production in kidney cells.

Standard blood tests often miss magnesium deficiency because only 1% of body's magnesium is in the bloodstream. Body prioritizes keeping blood levels stable at the expense of tissues.

For testing, I recommend red blood cell magnesium testing rather than the standard serum magnesium or even better, a magnesium loading test to determine tissue levels more accurately.

I recall this patient who was around like 65 year old male who had been on multiple blood pressure medication for years. He had stage four kidney disease, and his kidney doctor told him that dialysis was likely in his future.

When we tested him, we found severe deficiencies in his magnesium, vitamin D, CoQ10, and several B vitamins. What's interesting is that many of his medications were actually depleting these nutrients, a fact his doctors never discussed with him.

His statin was depleting CoQ10, his diabetic was depleting his magnesium, and by demands his acid blocker was impairing Whiteman B12 absorption. It was a perfect storm of drug induced nutrient depletion.

Medication-Induced Nutrient Depletion

After six months of targeted depletion therapy, his kidney function improved enough to avoid dialysis, and we were able to reduce his medication burden by working with his primary doctor.

Now let's discuss antioxidants. Your kidneys, protection against oxidative damage. Your kidneys are highly metabolic, active organs that use a lot of oxygen, making them particularly vulnerable to oxidative stress.

Three critical antioxidants for kidney health are glutathione one, which is your body's master antioxidant often depleted in kidney disease. White amine E, a fat soluble antioxidant that protects cell membranes.

Selenium, which is essential for the function of glutathione. And BR oxidase, a key antioxidant enzyme. Research has demonstrated that glutathione one per oxidase activity and total glutathione levels are significantly decreased

in patients with chronic kidney disease, contributing to ongoing oxidative damage.

Now, let's talk about omega three fatty acids, particularly EPA and DHEA, which are chronically deficient in the standard American diet but critically important for kidney health.

So omega three deficiency contributes to inflammatory kidney damage through several mechanisms, including imbalanced omega six to omega three ratio that leads to pro-inflammatory signaling.

Antioxidants and Omega-3s for Kidney Health

Research has demonstrated that omega three supplementation in chronic renal failure models significantly reduce markers of oxidative stress, inflammation, and fibrosis.

It also decreased the two hallmarks of progressive kidney disease. For testing, I recommend doing omega three index, which measures the percentage of EPI and DHEA in the red blood cell membranes.

And finally, I'm going to discuss about bite animals, particularly folate, B6 and B12, which play a crucial role in preventing homocysteine mediated kidney damage.

Homocysteine is an amino acid that, when elevated, promotes oxidative stress and related dysfunction and inflammation in the kidneys. B vitamin deficiencies lead to elevated homocysteine through impaired metabolism.

Many people have genetic variations that impair their ability to activate certain vitamins, making standard supplementation ineffective. This is why genetic testing and using activated forms of these nutrients can be crucial.

Now that we understand these key nutrients, let's discuss practical strategies for identifying and addressing deficiencies. So remember that go beyond standard blood test.

Request specialized testing like 25 O-H vitamin D both D two and three RBC Magnesium omega three index homocysteine levels. Oxidative stress panels may be considered genetic testing like MDH, for which we check in all of our patients to understand the detoxification pattern.

Eight also important to address medication induced nutrient depletion. So it is very important to work with a knowledgeable provider to identify if your medications are depleting clinical nutrients.

Focus on bioavailable forms of supplements vitamin D3 with K2 for proper calcium handling.

B Vitamins, Testing, and Supplement Strategies

Chelating magnesium forms like magnesium, glycine, or merely methylated b-vitamins. If you have five variations liposomal glutathione or NAC as a precursor pharmaceutical grade triglyceride form omega three, right.

And the most important thing also is absorption. Address gut health as inflammation can impair nutrient absorption. Consider timing of these supplements.

Take fat soluble nutrients with healthy fats for better absorption. With kidney disease, you have to be particularly careful with the quality of supplements you take.

Many supplements contain unnecessary fillers, heavy metals, or ingredients that can be harmful to compromised kidneys. The most important thing is personalization.

What works for one person may not work for the other, so it is important to have individual assessment of your labs. Let me show one final, patient that I recall.

I think she was like maybe in her early 50s, and she came to me with, stage three, kidney disease, high blood

pressure, fatigue, all sorts of years. She could barely function.

We conducted comprehensive testing and found multiple deficiencies, including severe vitamin D, low magnesium, elevated homocysteine levels as well. We implemented a comprehensive protocol with specific supplementation, and she improved her kidney function in less than two months, from GFR of around 32 to 39, high blood pressure normalized and her energy returned.

Most importantly, she avoided dialysis, which her kidney doctor said was inevitable. So as we wrap up today's episode, I want to emphasize that nutrient deficiencies are not just incidental findings in kidney disease.

They're often driving forces in its progression. The conventional approach of waiting until kidney function declines to a critical level before taking serious action.

Patient Outcomes and Closing Advice

It's totally outdated. We now have the tools to identify and address these hidden root causes early. And remember, even though I'm sharing all this information today, I want to emphasize that I'm not your doctor.

I don't know what's going on with your specific situation, so please consult with a physician before making any changes in your treatment plans. I will see you in the next episode with another insight on kidney health or any other chronic disease.

If you are interested in a specific topic, then send me a message and we will focus on doing an episode on that by now. Thank you for tuning in to Doctor Talks.

We hope today's episode has enlightened and inspired you on your path to optimal health. Each day is a new opportunity to make choices that empower your wellbeing.

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