

Alternate Day Fasting for Weight Loss - Frankly Speaking EP 19

Transcript Details

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Dr. Frank Domino

Low-fat, low-carb, gluten-free, there are many ways out there to lose weight. Recently, a publication in JAMA looked at a unique way for weight loss called "alternate-day fasting." This has become popular, as have other fasting methods. Hi, this is Frank J. Domino, MD, and thank you for listening to 'Frankly Speaking on Family Medicine!' Joining me today is Jill Terrien, Assistant Professor in the Graduate School of Nursing, and Director of the Family Nurse Practitioner Program at the University of Massachusetts Medical School. Welcome to the show, Jill.

Jill Terrien:

Thank you, Frank. Let me just pose a clinic question to you, or a case. A 38-year-old male whose BMI is 36 presents for follow-up of his hypertension. He knows he needs to exercise and lose weight, but he has failed at previous diets. A friend at work has started a fasting program and your patient asks you if you recommend it. What do you say?

Dr. Domino:

Well, Jill, I have been getting more questions recently about different ways to lose weight, and fasting has become popular. A recent study in JAMA looked at using an alternate-day fasting program that sounded pretty good. What they did was they recommended for obese adults... They divided them into three groups. One group followed the alternate-day fasting program,

which on fast days, they took in 25% of their calorie needs; on non-fasting days, they took in 125% of their energy needs.

The second group was a calorie-restricted diet, where they just ate 75% of what their energy needs were thought to be, and the third group served as a control. They studied them over the course of a year, and they found that at six months and a year, there was no significant difference in the weight loss groups between the alternate-day fasting and the restricted energy intake groups. So, while alternate-day fasting might be effective, they both led to about a 6% weight loss over the course of the year. It was no better than just taking on a lower calorie diet.

Jill Terrien:

So Frank, that is really an interesting study. So here's your patient. So is it something that they have to do every other day? And talking to your patient, what would you recommend specifically?

Dr. Domino:

So for the patient that we have in question here, you'd chat with him about what he likes to eat and what his energy needs are in general over the course of a day, and help him try to figure out how to apply the alternate-day method to his lifestyle. So, for the average adult male, they need about 2,000 calories a day. So, for that individual, they're gonna probably need about 500 calories on their fasting day and maybe between 2,000 and 2,500 calories on their non-fasting day. So you have to help them figure out, A, How are they are they going to do just eating 500 calories a day, and maybe how to think through what might be the best method for them to apply.

This study and other studies have looked at different ways to approach alternate-day fasting and eating small calorie intake. One method is to just to eat 500 calories for this patient as their evening meal. If you're a patient who's overweight or obese and has a hard time sticking to eating just a small amount once a day, you can break it up to two or three small meals a day. And one method to do that is to take a meal replacement shake once or twice a day as a way to reach

that 500 in calorie goal. And then on the non-fasting days, tell them to eat normally, but it doesn't mean it's cookies and ice cream. It's to eat how they would normally eat in a healthy manner.

Jill Terrien:

That's great, Frank. How about side effects? You know, we are a society that... Food is very important to us and it's everywhere. So the patient's motivated, they've asked you about it. And are they're gonna be dizzy? Are they gonna be... Have you noticed any side effects in the reading that you did?

Dr. Domino:

Okay. So, this study looked at a variety of outcomes, and there were two areas that rose to the top of significance. One was that, and this is all throughout the obesity and weight loss literatures, applying something like this to someone who has an eating disorder can be dangerous. Although there's no data that shows that, there is a significant concern. So someone especially with binge eating disorder, on their non-fasting days, that you might be feeding into a cycle that could be severe. The other thing that was found was that although there was no significant change in cardiovascular risk factors, in particular lipid outcomes with regards to HDL, there was a small but statistically significant increase in LDL levels in the alternate-day fasting group. Again, this study was only done for a year, so we don't know whether that increased cardiovascular risk or if that's just a statistically significant and clinically non-significant finding, but those two things need to be kept in mind.

Jill Terrien:

That's great. So, we had, in this case, the patient asking you about the study. How do you apply it in general to the patients that you see? When do you offer it as an option?

Dr. Domino:

Well, I think alternate-day fasting is somewhat... If someone comes in and asks me about it and they failed with typical restricted dietary intake plans in the past, I'm happy to give it a try. I think

if they failed at more traditional methods, this is worth them trying. The theory about how it works is that on those days where you are fasting, your body still has the same energy demands, and when there are no other calories coming in through your GI tract, it turns to the adipose tissue and consumes that for the needed energy. So, I think they're safe to apply in patients who may have failed traditional methods or are at least curious about taking this approach. My personal belief is I always encourage patients that the goal of weight loss is both for how they feel and often how they look, but also to lower all types of risks. And we know obesity correlates with a variety of outcomes.

But the best way to lose weight is to incorporate dietary changes with exercise. And there's a good bit of data that shows doing endurance exercise, burning calories especially quickly, getting yourself into anaerobic metabolism is the best way, combined with calorie restriction in some form, to lose weight and to prevent future heart disease. So, when patients say, "I wanna lose weight," and I ask them about exercise and they say they're walking their dog, I tell them that's terrific for the dog, but what I really need them to do is something that's going to burn some calories quickly.

Jill Terrien:

Frank, do you have any recommendations on... And we know we talked about calorie amounts and the percentages on the fasting days. How about hydration status? Is there anything they need to pay attention to, particularly on those fasting days?

Dr. Domino:

So, it's interesting, this study did not look at fluid intake. But in general, there's really great data both in adults and children, that keeping yourself adequately hydrated with water, just water, led to improved weight loss outcomes. There have been a variety of theories about physiologically why this makes sense. There's a number of behavioral studies that say people, when they're thirsty, will eat because that forces them to drink. I'm not sure what the actual physiologic benefit of hydration is, but I do think there's great convincing data, that probably six- to eight-ounce servings of water throughout the day is going to lead to improved weight loss and lower

the risk of any adverse outcomes.

Jill Terrien:

One last thought, Frank, is there any patients that you would not recommend this diet for? Besides we talked about the binge eating, that might be a risk.

Dr. Domino:

I think patients who have brittle diabetes or are using preprandial insulin or sulphonylureas, those populations are going to be folks who are gonna be using... They need adequate intake every day. So I think that would be my only hesitation. That being said, I think the world is moving away from short-acting agents that can cause hypoglycemia. So, for an obese, type 2 diabetic on a one- or two-drug regimen that doesn't induce hypoglycemia, this is a fine alternative if they've failed more traditional methods for weight loss.

So to summarize, alternate day fasting is an effective method for weight loss. It's no more effective than traditional calorie restriction diets, but the risk of harms is extremely low when applied to the appropriate populations. And for some folks who've failed other methods, this may be a new and novel way that works well for them. Join us next time when we discuss the adverse effects of short-term corticosteroid use.