

COMMENTARY

Prescribing a Diet to Treat Depression

Drew Ramsey, MD

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The first-ever randomized controlled clinical trial^[1] to test a dietary intervention as a treatment for clinical depression has just been published. I am Dr Drew Ramsey. I am assistant clinical professor of psychiatry at Columbia University in New York City, and I am reporting for Medscape Psychiatry. I am excited to share the results of this very interesting study with you.

Two researchers, Felice Jacka and Michael Berk, led a consortium of Australian Institutions based at the Food & Mood Centre at Deakin University in Victoria, Australia. Over 3 years, they recruited several hundred patients with moderate to severe depression and entered 67 into a 12-week parallel group trial. The treatment group received seven 60-minute sessions of dietary counselling. The parallel control group received a matching social support protocol. All but nine of the 67 participants were receiving another active treatment—either psychotherapy, medications, or both.

In the dietary counseling sessions, participants were implored to increase consumption of foods in 12 food categories. The food categories, as you may guess, included whole grains, fruits, vegetables, nuts and legumes, and lean meats, chicken, and seafood, and to decrease consumption of foods that are correlated with a higher risk for depression: empty carbohydrates, refined starches, and highly processed foods. During the past decade, a mountain of evidence has been building that dietary patterns are strongly correlated with risk for depression. We have not had a randomized controlled trial like this to direct our clinical care, however.

The outcome was quite robust. The researchers found a statistically significant 7.1-point difference on the Montgomery-Asberg Depression Rating Scale (MADRS) in favor of the treatment group, which was

their primary outcome. The researchers extrapolated that there was a 2.2-point reduction in the MADRS for every 10% adherence to the healthier dietary pattern.

They developed that pattern, which they called the Modified Mediterranean Diet, or the Modi-Medi Diet, by combining recommendations from the Australian government and the Greek government, and data from an earlier analysis by Felice Jacka and her colleagues^[2] that determined which dietary factors played the largest role in fighting depression with diet.

In this latest study, the number needed to treat was 4.1. That compares favorably with data from two pooled analyses of adjunctive aripiprazole^[3,4] in which the number needed to treat was 10. The augmentation effect was quite robust for an adjunctive treatment. In the treatment group, about 32% of patients achieved remission, compared with 8% in the control group. In terms of risk-benefit profiles, a dietary intervention is emerging as a very safe and effective way for us to engage our patients.

As we know from our experience in our nutritional psychiatry clinic here in New York, discussing food is a great way to get a conversation going about aspects of a patient's life that we traditionally do not discuss. When you think about all of the information one can get about food and how people care for themselves, it becomes an intervention that not only helps build a very strong alliance but also is just a lot of fun—talking about lentil soup and where people get their seafood, and focusing overall on the food categories that individuals need to improve. Overall, these good foods tend to be leafy greens, rainbow vegetables, a variety of seafood, and improving the quality and amount of meat they consume, and, as the researchers note, reducing the consumption of foods that increase the risk for depression and other disorders.

One issue about eating for brain health is the cost, as often the recommended seafood and organic food can cost more. But the Australian researchers found that eating for brain health costs less.

The average Australian spends \$138 a week on food. Those who were taking part in the study spent just \$112.

The study is called the SMILES Study, which makes me smile. SMILES stands for Supporting Modification of Lifestyle in Lower Emotional States. We hope the results of this intervention will be replicated.

For those of you who are incorporating food and nutritional assessments into your clinical practices, this is more evidence that you are on the right track. It is not only an engaging and alliance-building conversation, it is also a very effective intervention. For those who have not incorporated nutritional and lifestyle assessment into your practices, this study provides a great impetus to do so. Taking a peek at the paper will show you the methodology, which revolves around conducting a good dietary assessment.

I should note that the people who entered the trial had a poor dietary quality. Overall, that is what we also see in our clinic: Individuals who have the best response to a brain-food intervention are those who are eating a nutrient-depleted diet, often called the "beige diet" or the "12-year-old boy diet," consisting of empty carbohydrates, pizza, pasta, baked goods, and few of the brain nutrients that we hope patients will seek out based on the mountain of data we have.

Certain nutrients, such as the omega-3 fats, zinc, magnesium, iron, and vitamin B₁₂, are very effective in terms of preventing depression and are readily found if you choose the right core set of foods. These are the foods that make up traditional diets, the foods that are highly correlated with a lower risk for depression and dementia. With this new randomized controlled clinical trial, this set of foods looks as though it can play a role as an adjunctive treatment for clinical depression and help your patients achieve full remission.

I am Dr Drew Ramsey for Medscape Psychiatry. Please let us know in the comments section below what you think of the study and how you are incorporating food into your clinical practice.