

## Staying Healthy During Tough Economic Times

David Seaman, DC, MS, DABCN

Many of us are feeling the economic crunch. Money is tight and the bills continue to arrive in our mailboxes. Stressful times like these demand resiliency on our part. Interestingly, a mentally stressed state can promote systemic inflammation.<sup>1-4</sup> Avoiding mental stressors is not likely to be easy during these times, so we must consider the importance of avoiding systemic inflammation caused by a lack of exercise and a poor diet.

Our mechanically oriented training leads us to view inflammation as a consequence of an identifiable physical injury. However, inflammation is more complex than this. We promote development of chronic, systemic subclinical inflammation by avoiding exercise and remaining sedentary.<sup>5-8</sup> In other words, we can become chronically inflamed without physical injury. Not surprisingly, we should exercise daily to help prevent inflammation, and we must also modify our dietary habits.

### Pro-Inflammatory Nutrition Is Expensive

Chronic, systemic subclinical inflammation is also promoted by subsisting on the average American diet, which is high in calories and low in fiber and nutrients. [Approximately 80 percent of the calories consumed by Americans are derived from refined flour products, refined sugar, refined seed oils \(concentrated source of omega-6 and trans fats\) and fatty meat.](#)<sup>9</sup> It is now common knowledge that eating [excess calories from sugar and fat leads to postprandial systemic inflammation,](#)<sup>10</sup> which is [thought to function as in insidious promoter of heart disease, diabetes, osteoporosis, osteoarthritis, rheumatoid arthritis, Alzheimer's disease, obesity, hypertension, asthma, depression, inflammatory bowel disease, psoriasis and cancer.](#)<sup>7,9-12</sup>

### Anti-Inflammatory Nutrition Is Inexpensive

Lean meat, fish, chicken, fruits, vegetables and nuts form the foundation of a diet that blunts a postprandial inflammatory response. This is referred to as an ["anti-inflammatory diet."](#)<sup>10</sup> Not surprisingly, this diet is [recommended to help prevent the above-mentioned pro-inflammatory diseases,](#) the treatment of which represents a massive drain on financial resources, both personally and for businesses.<sup>7,9-12</sup>

A common argument is, "I can't afford to eat lots of fruits and vegetables," or "Healthy foods are expensive." I tend to strongly disagree with these arguments. A cup of coffee and a doughnut can cost up to \$5. A bottle of 20 oz. soda costs more than \$1. In contrast, a [5-pound bag of frozen carrots, broccoli and cauliflower costs \\$5 at Sam's Club.](#) A 1-pound container of pre-washed organic [salad greens costs about \\$4.](#) A large sweet potato that can be split between two meals costs about 75 cents. While certain nuts are very expensive (macadamias, for example), many are very reasonable. Lean meats, fish and chicken are reasonably priced and can be added to the vegetables and sweet potatoes. Fresh fruit remains very reasonable and should be one of the snacks of choice.

Dark chocolate is inexpensive and can be mixed with raw nuts and raisins for a great snack or dessert. I often melt a 50-calorie piece of dark chocolate with a little coconut oil and add some nuts and raisins. I place this combination on a piece of wax/freezer paper and place it into the freezer for about 10 minutes. My reward is an anti-inflammatory candy bar.

In short, it is not more expensive to eat anti-inflammatory, if one shops wisely. Certainly, preventing the expression of chronic disease will save countless dollars and heartaches associated with the accelerated morbidity and mortality associated with pro-inflammatory living. In short, we cannot afford to eat any other way but anti-inflammatory.

### Inexpensive Supplements for Health Promotion

Unlike what I once thought, nutritional supplements typically do not function as substitutes for medications, particularly when inflammatory dietary habits are maintained. There is no supplement that will lower blood pressure as consistently as medications. No supplement can influence blood sugar like Metformin. While ginger and turmeric inhibit cyclo-oxygenase, it is not with the same power as nonsteroidal anti-inflammatory drugs.

The key really seems to involve the adoption of an anti-inflammatory diet and taking key supplements that support the reduction of inflammation and free-radical generation. The basic supplements include a multivitamin without iron, magnesium, fish oil and vitamin D.<sup>13-19</sup>

Fortunately, the basic four supplements mentioned above are reasonably priced. The cost is approximately \$60 to \$80 per month, which is less than \$3 per day. If a patient can only afford one supplement, vitamin D seems like the best choice because research has demonstrated that vitamin D insufficiency is pandemic. The next best financial choice for a supplement would be a multivitamin/mineral without iron. After that fish oil should be added and finally magnesium. If a fifth supplement can be afforded, probiotics are the best choice as they have a strongly anti-inflammatory effect in the gut.

If money is not at issue, additional supplements should be considered, including coenzyme Q10, lipoic acid, acetyl-L-carnitine, ginger, turmeric and garlic. These supplements help to promote ATP synthesis and reduce free radicals and inflammation.

### Conclusion

While finances are tight for many due to external economic forces, we can easily make this situation a lot worse by pursuing disease expression due to a pro-inflammatory lifestyle. Medical care for pro-inflammatory diseases is extremely expensive and generally preventable by adopting an anti-inflammatory diet that is no more expensive than one that is pro-inflammatory. Key supplements can be added based on financial ability.

We should consider that paying for expensive medical care will put most of us into debt even when economic times are good. So, it makes no sense to pursue disease and expensive medical care with a pro-inflammatory lifestyle when economic times are not so good. Share this information with your patients and let them know nutrition does not need to be compromised, even when the economy is down.

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