

## Blood Chemistry, Kids, and Profound Change in Two Weeks: A Study Inspires a Commentary

G. Douglas Andersen, DC, DACBSP, CCN

The hardest part of writing this article was deciding on a title that would grab as many readers as possible. The best part was reporting on the amazing power of food and activity. Last month, we saw what effect portion size has on what is consumed.<sup>1</sup> This month, we see how powerful food can be on the internal chemistry of your children.

Researchers did blood tests on kids ages 10 to 14 (average age: 12.2), before and after they spent two weeks on a Pritikin residential program.<sup>2</sup> There was no limit on the amount of food the kids could eat. There were two catches: Every day, the kids were aerobically active; and they ate foods that were unrefined, unprocessed, high fiber, low fat, low sugar, low sodium, and low cholesterol. The results after only two weeks speak for themselves:

	Baseline	Two Weeks Later
Total cholesterol	164 mg/Dl	117 mg/Dl
LDL	124 mg/Dl	79 mg/dL
HDL	38 mg/Dl	40 mg/dL
Triglycerides	141 mg/Dl	80 mg/dL
C-reactive protein	4.15 mg/L	1.90 mg/L
Insulin	22.6 U/MI	15.5 U/mL

There is not a vitamin, mineral, enzyme, herb, food concentrate, glandular, green drink, food extract, detox powder, protein formula, miracle juice, amino acid, or natural systemic up regulator that could deliver results like these!

### Comment

It is time to step back and take an objective look at what we as a society seem to say about food, especially to our children. Obesity in kids and teens has doubled since the 1970s.<sup>3</sup> Elevations in insulin, blood pressure and blood lipids are common in overweight kids.<sup>4</sup> And although there is some confusion regarding diet plans and their emphasis on protein, carbohydrate and fat, I contend that most people know what is and isn't healthy. I think even your most nutritionally naïve patients could get the following quiz right:

The "Which Food Is Healthier? Quiz

Bran flakes or frosted flakes? Apples or apple pie? Grilled chicken or grilled cheese? Strawberry yogurt or strawberry ice cream? Carrots or carrot cake? Walnuts or donuts? Brown rice or brownies?
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I realize this is so obvious it is silly, but that is my point. The tired excuses we hear about how hard it is to eat right are just that - tired excuses. It's hard to eat a pear, but not a cookie? Come on!

On holidays, birthdays, and special occasions, why do we let our kids have food and drinks that we know are detrimental to their health?

Do we tell our children that since it's a holiday, they don't have to wear their seat belts in the car? Or allow them to boat without a life jacket? Or ride their bike without a helmet? If we take yet another step back, two more issues need to be addressed: love and reward.

Our culture shows love to our youngest by giving them the unhealthiest foods we produce. We further confuse them by using these same foods as a reward for reaching a goal, accomplishing a milestone or behaving well. For example, if you win a title, pass a test, or clean your room, you get cake. But then we tell them too much cake is not good. However, kids think, "I do good, I get cake, so how can it be bad?"

Eating is a pleasurable activity. The vast majority of the time humans have been on the planet earth, the food supply has been inconsistent at best and scarce at worst. Those who lived long enough to reproduce passed on their "drive to eat" genes. The same is true for animals. That is, there was no biological reason for animals to develop a "that's enough" gene concerning food intake. Food for wild animals is also inconsistent, and at times scarce. But put a wild animal in captivity, and if its food supply is not limited, it will eat itself to health problems - even death. (Ever have a fish tank as a kid?)

Taking a look at history once again: When soap and water were scarce, bathing together was a very important cultural activity. Today, taking a bath is no longer special, even though it continues to be pleasurable. It is not a social activity or reason to get together with others any longer. Today's common people have private bathing facilities that once only kings enjoyed. We may want to consider food in the same light.

Citizens of the developed world have an unlimited amount of food available 24 hours a day. What was once mandatory to maximize survival (the drive to consume - essentially, living to eat) is now causing 25,000 to 300,000 premature deaths in the U.S. each year (depending on which statistics you choose to believe). In light of these disheartening numbers, this author feels it is time for a cultural shift to an "eat to live" approach. Rather than equating eating with having fun, the act should be considered a part of daily health and hygiene. There is nothing happy about a meal that is high in total fat, saturated fat, refined starches, simple sugars, sodium, and calories, while at the same time, low in fiber, phytochemicals, vitamins, and minerals. Things are even worse when the only vegetable in the meal (potato) is deep fried in polyunsaturated vegetable oils that, when heated to a high temperature, become oxidized and generate free radicals, which we then ingest.

Surely the fun of a holiday can be structured around interaction, activity, games, gifts, and dialogue, rather than unhealthy food. Now, take one more look at the table and check out what "eating to live" can do for your children.

## References

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G. Douglas Andersen, DC, DACBSP, CCN

Brea, California

[gdandersen@earthlink.net](mailto:gdandersen@earthlink.net)

[www.andersEnchiro.com](http://www.andersEnchiro.com)

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