Parameters of a Healthy Modern Diet

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Thomas A. Burns, Ph.D. Klamath Falls, Oregon

Seven Recommendations Define the Essentials of a Healthy Modern Diet

1) Limit Carbohydrate Consumption. And greatly reduce the intake of refined, simple carbs. Why? Grains, and especially refined grains, in large quantities are new in the human diet and arise with the advent of agriculture initially some 9,000 years ago and pervasively world-wide only in the last 1,000 years. This is not nearly enough time for humans to adapt at the genetic level [physiologically] to a big change in diet from the diet of our 200,000 year old ancestors. These ancestors relied much more on the hunting of wild animals for fat, protein, and essential nutrients and on seasonal gathering of fruits and vegetables for fiber, vitamins and minerals, and nutrition security.

Large amounts of easily digested carbohydrates in the diet call heavily on the pancreas to produce insulin. When insulin has completed its first job, which is to deliver glucose to highly metabolically active cells (especially those of the nervous system), it moves into its second job, which is to help create triglycerides to send excess calories to be stored in adipose [fat] tissue. If this excess happens frequently, the storage units get full and have to multiply to accommodate the incoming triglyerides – thus the explosion of body fat and weight gain.

Like an annoying telemarketer, the other cells of the body get tired of telling insulin “No, I don’t need any sugar;” so they stop answering their doorbells. This is the start of developing insulin resistance and syndrome X, which are directly related to developing obesity and diabetes. Excess glucose and insulin also contribute to inflammation throughout the bodily system, which has been found to be a key underlying factor in the development of nearly every major chronic health issue that we see in the world today.

As the foundation hormone controlling the basic transfer of energy across the membrane of the cells throughout the body, when insulin is in a state of imbalance, the hormonal complex as a whole is disrupted – and excessive insulin thereby becomes a cause of multiple other deficiencies and diseases. Refined grains and starches found in most processed foods readily evoke an elevated insulin response. So these are primary among the carb culprits to avoid because they are most responsible for the negative health effects cited above. Avoid: white potatoes, white rice, all white flour goods [bread, pasta, cake, cookies, crackers], most cereal, and soft drinks and many “fruit” drinks – especially those sweetened with high fructose corn syrup. Choose whole grain foods. Evidence is mounting that a diet rich in simple carbohydrates may be a major cause of many of the diseases of modern humans.

2) Avoid Foods that are Produced Using Pesticides, Hormones and Antibiotics. Why? Pesticides are toxins and when they are ingested in very small quantities over many years, they can be detrimental to the normal functioning of human physiology. Most pesticides, herbicides, fungicides, hormones and antibiotics are lipid soluble, which means they are housed in and travel in the fats of our food sources as they move up the food chain. Protected in fats, these toxins become available as we digest the tainted fats that are present in so much of our modern foods.

Hormones and antibiotics are primarily used in raising industrial scale livestock to make them grow and gain weight quickly, or to prolong lactation in the case of dairy producing animals. This is not just bad for the health of these animals, but the food products we consume from these animals carry these toxins in small amounts upstream to us. Interestingly, some research indicates that antibiotics from this source may contribute to the modern epidemic of obesity because just as in the cattle, antibiotics change our gut microbiome to favor bacteria that end up promoting weight gain.

3) Limit the Consumption of Meat and Dairy Products to animals raised in conditions and on diets that are as close as possible to those of comparable animals in the wild. Why? Make no mistake, meat and dairy can be a healthy component in a diet. But meat and animal products that are produced where animals live in confined, poor conditions and with feed that is both not natural to the animal and full of toxins (see #2) are different from these same food products coming from wild animals or animals raised in a manner consistent with the animals' own health needs. Importantly, meat and dairy coming from “industrially” raised and grain or soy finished animals do not contain the same healthy 1 to 4 anti-inflammatory ratio of omega3 fats to omega6 fats that occur in animals raised in natural conditions and on a natural diet. Instead these industrially raised animals pass along to us a pro-inflammatory ratio of 1 to 20 of omega3s to omega6s. So, the problem is not so much animal fat per se in the modern diet as it is the kind of fat in the meat and dairy and eggs that modern livestock facilities are producing for human consumption. To follow this recommendation, look to consume meat products such as grass fed beef [often finished on alfalfa rather than grain], free range fowl and their eggs, wild fish rather than soy-fed fish, free range pork, and organic dairy products. Beware of producers' use of the term “natural.” It usually denotes nothing about whether the food product actually meets healthy requirements.

4) Make Fruits and Especially Vegetables About 40% of the Diet. Why? The diet of our human ancestors focused on animals, and they ate most parts of the animal including bones [marrow] and especially organ meats [brains, liver, kidneys, lung, heart, etc.]. In fact these organ meats were prized over the flesh of animals exactly

because hunter gatherers had learned that that was where the highest food value lay. Organ meats and offal contain concentrated essential nutrients derived from plants and other animals which are passed on to us when we consume them and their products. But modern day humans are squeamish and focus on eating only animal muscle tissues [flesh]. In a way this may be smart because the organs of industrially raised livestock concentrate toxins as much as nutrients. So, in a modern day context, humans need to eat more plant based foods directly in order to get all the nutrients they require. In addition, the fiber that plants confer is important for maintaining human gastro-intestinal health. Selecting organic fruits and vegetables makes sense in order to abide by Recommendation #2.

5) Limit Salt Consumption. Why? Salt is essential to life. It is one of the basic human tastes so we naturally seek it out, but in pre-agricultural and pre-industrial times salt was not readily available so it had limited input into the human diet. In modern times salt is extremely plentiful and cheap, and it is over abundant in processed foods where it is used as a flavor enhancer and preservative. The result is that it is easy to consume salt far beyond any dietary need which can lead to various states of physiological toxicity. Excess salt consumption is especially problematic for the cardiovascular system.

6) Healthy Mothers Should Breast Feed Their Infants for the first six months to a year. Why? The long term health of both the mother and the infant are improved so long as the mother is and has been drug free and not a smoker. Healthy human breast milk contains many micro nutrients and the correct balance of macro nutrients to support the maturation of the baby in the critical development period of the first year. In addition, breast milk offers the infant – during the exact time when the infant is most vulnerable – considerable immunity to disease through the immunity that the mother has acquired. Cow's milk and soy based alternatives that the food industry offers in baby formula constitute poor substitutes. And the greater degree of bonding that occurs between mother and child also promotes the health of each. In addition, mothers who breast feed demonstrate a lower occurrence of some diseases later in life, and breastfed children exhibit both better immunity and better glucose control than their industry-based formula counterparts.

7) Take Care When it Comes to Buying and Consuming GMO Foods. Genetic engineering is in its infancy and recognizing what regulations on the alterations that result from genetic engineering are required in order to assure human and general ecological protection is also in its infancy. It is entirely possible that we are allowing genetically modified foods to be produced without what will emerge to be the needed restraints. Genetically modified foods may not be inherently detrimental and such foods are likely to become a greater and greater part of the human diet in the future – replacing the less efficient selective breeding and hybridization

processes – but we need to exercise caution. This is especially true when we introduce genes into one species from a completely different species, and even more when the resulting altered species is fertile, carries these genetic changes to the next generation, and thereby is able to promote gross changes in the natural plant or animal system. In addition to the possible unknown consequences of consuming GM foods, there is the problem of the dramatic increase in the use of pesticides and herbicides on GM crops. As already stated above in Recommendation #2, these toxins move up the food chain and end up in the food on our plates. Chronic exposure to low doses of these potent chemicals over time can wreak havoc on many systems of the human body.

Conclusion

Unfortunately, we cannot rely on the U.S. government to provide healthy food regulations because it is very significantly influenced by the vested interests of the existing agricultural and food processing industries. As a result, our government tends to be either complacent or extremely reactive [rather than proactive] when it comes to requiring these industries to produce healthy food products. And the government's dietary recommendations are often antiquated in relation to what has become the established perspective among clinical nutritionists and other food health scientists.

The health of anyone can benefit as a result of changing to a diet that abides by the above seven recommendations, but it is especially relevant for today's children and young people because they can benefit the most. Those of us who were born around the time of WWII are the ones who have been the long term guinea pigs of the modern agribusiness industry and the industrial food processors. The diseases that we suffer from demonstrate the negative effects of a diet heavily based on the products of these standard producers. It is for the next generation to be smart enough to learn from our negative example.

Few people will probably elect to abide strickly by all seven of these recommendations. But change begins by people becoming aware of what the dietary goals should be and why. A great deal can be gained if consumers simply reduce carbohydrate consumption overall and substitute mostly whole grain foods for simple carb foods together with the selection of more organically produced fruits and vegetables as well as meat and dairy products. And by choosing to buy foods more in line with the seven dietary recommendations above, with their dollars consumers can push the food industry as a whole in the direction of providing more healthy foods.

{This essay benefits from input from my daughter, Kia Burns Sanford, MS Clinical Nutrition.}