

# Excerpts from *The Adaptation Diet*

## Excerpt 1

### Sara, a Patient of Mine

Sara was always feeling stressed. She was anxious, light headed, tired, and depressed. No longer able to hold a job, she was in a doctor shopping frenzy. Sara had a history of episodic depression and fatigue as well as hay fever and other allergies. At thirty-six, she felt that life was passing her by, was rarely feeling well, and was always on the verge of overreacting to whatever challenges life presented.

Every day when waking, her level of dread and anxiety was at its highest, calming down after breakfast. Sara had always had an enormous sweet tooth; her breakfast was usually a sweet roll, juice, and coffee. She snacked on chips and pretzels throughout the day. She also liked red meat; one of her favorites was a carne asada burrito at a local Mexican fast-food restaurant. Without knowing it, Sara had multiple food allergies that we later identified through intradermal skin testing. Sara was given a detailed course of dietary and supplemental recommendations (detailed in the book).

Once these suggestions were adopted, Sara improved quickly. Her cortisol levels returned to normal. She slept more deeply and awoke refreshed. Her anxiety and fatigue during the day were much reduced. She was thrilled by a weight loss of twelve pounds over six weeks.

As many of my patients have proven, what is on the dinner plate has as much an influence on adaptation and aging well as anything else that a person can control.

## Excerpt 2

### John, a Patient of Mine

John, a patient who is wheat intolerant (he did not know it at the time), traveled to China on vacation,

where at that time no wheat products were available. He felt more energetic and less achy and moody during the trip, though he assumed it was because of the vacation and the incredible experience of touring China. When John returned and resumed his normal eating habits, including wheat cereal in the morning and sandwiches daily, the fatigue and muscle aches returned with a vengeance. He never thought that his diet was the culprit.

When he relayed this story to me, I asked him to stop eating wheat for a week and then reintroduce it. The same sequence happened: his fatigue and muscle aches improved when he stopped eating wheat and returned once he ate wheat again. We then skin tested John for food allergy to confirm the sensitivity to wheat. John had unmasked his wheat allergy during his trip and the test period. By doing this, he moved from an adapted state in which there was a hidden price to pay for the wheat intolerance (fatigue and muscle aches) to a preadapted state where the symptoms are gone but when exposed to a food allergen, the reaction will be stronger. This technique of unmasking is the reason that a simple home testing approach (avoidance and challenge), which is Phase Two of the Adaptation Diet, helps to identify food offenders.

### Excerpt 3

## The Mediterranean Diet: Phase 3 of The Adaptation Diet

The Mediterranean diet protects against obesity and diabetes through reducing inflammation and cortisol elevation. It includes consumption of significant amounts of vegetables and fruits and using olive oil as the principal fat. Both epidemiological and interventional studies have revealed a protective effect of the Mediterranean diet against mild chronic inflammation and its metabolic complications. Mounting evidence suggests that Mediterranean diets could serve as an anti-inflammatory dietary pattern, which could help in fighting diseases that are related to chronic inflammation, including visceral obesity, heart disease, type 2 diabetes, and the metabolic syndrome. There is also a lower incidence of several types of cancer with these dietary practices.

Dietary patterns close to the Mediterranean diet, rich in fruit and vegetables and high in monounsat-

urated fats, are negatively associated with features of the metabolic syndrome. The metabolic syndrome, also called syndrome X, includes high blood pressure, insulin resistance, truncal obesity, high triglycerides and blood sugar, and low HDL cholesterol. It is a major risk factor for heart disease and diabetes. Some recent studies, including one done by Balbio (2009) in Spain, have demonstrated a 25 percent net reduction in the prevalence of metabolic syndrome following lifestyle changes mainly based on nutritional recommendations.

#### Excerpt 4

### Beyond Adaptation – The Promise of Epigenetics

Can we influence our biological destiny? Our ultimate adaptation would be the ability to alter the genetic expression that determines the function of every cell and organ. It now appears that many of the choices we make in terms of diet and lifestyle actually do change how genetic information is expressed and passed from one generation of cells to the next. Research in epigenetics, the science that explores how genes are expressed, has shown how genetic control of essentially every cell in the body is influenced by diet and environment. One example of the adaptive power of diet is found in cells that have become abnormal, such as cancerous cells, which can be returned to a normal state through the influence on the epigenome of a group of powerful phytonutrients described by researchers as bioactive foods.

Throughout this book I have presented a program to protect health by improving adaptation and controlling cortisol levels through diet. Cortisol levels and all other biochemical functions are ultimately determined by the expression of genes. The next step in adaptation and healthy aging is to learn what controls gene expression in daily life and what we can do to impact it through changes in diet and exercise, while reducing toxic exposures from our environment.

Epigenetics refers to heritable (inherited) changes in gene expression, without changes in DNA sequence, that can be passed on through generations of cells in all organs. Unlike previous ideas about the fixed and unchangeable state of the genetic code that is carried in the DNA of every cell, epi-

genetics describes changes in the structure around the genes influenced by diet and environmental factors. This information, called epigenetic marks, can also potentially be passed from mother (and father) to child and even through several generations of offspring. Even cortisol levels in children can be altered through epigenetic mechanisms, as described in a 2012 study by Jiang and colleagues of pregnant women who were given high levels of the essential nutrient choline (found in eggs, fish, milk, red meat, and soy) during their pregnancy. The researchers found that genes that control cortisol levels in the offspring were downregulated through epigenetic marks from the use of choline during pregnancy. Possibly these epigenetic effects can lead to a less stressed and better adapted life in these children.