Stress Reducing Foods And Diets From Antiquity
The mission of AIS is to improve the health of the community and the world by setting the standard of excellence of stress management in education, research, clinical care and the workplace. Diverse and inclusive, The American Institute of Stress educates medical practitioners, scientists, health care professionals and the public; conducts research; and provides information, training and techniques to prevent human illness related to stress.

AIS provides a diverse and inclusive environment that fosters intellectual discovery, creates and transmits innovative knowledge, improves human health, and provides leadership to the world on stress related topics.
Contentment is a quarterly magazine published in Spring, Summer, Fall and Winter with news and advertising designed with the general public in mind. It appeals to all those interested in the myriad and complex interrelationships between stress and health because technical jargon is avoided and it is easy to understand. Contentment is archived online at stress.org. Information in this publication is carefully compiled to ensure accuracy.

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The American Institute of Stress is a 501c3 non-profit organization, headquarted in Weatherford, Texas. We serve the global community through both online and in-person programs and classes. The Institute is dedicated to advancing understanding of the role of stress in health and illness, the nature and importance of mind/body relationships and how to use our vast innate potential for self-healing. Our paramount goal at the AIS is to provide a clearinghouse of stress related information to the general public, physicians, health professionals and lay individuals interested in exploring the multitudinous and varied effects of stress on our health and quality of life.

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Change can be stressful. In fact, our reactions to change is the very definition of stress. But change can be wonderful too. Or anything in between. It is as inevitable as death and taxes.

I first became aware of Dr. Heidi Hanna when she asked me to write the foreword to her book, *The Sharp Solution* in 2012; and again, the following year for her second book, *Stressaholic*. I introduced that book as the human being owner’s manual for which humanity has been awaiting. I continue to recommend that book frequently. I recognized her as a rising star in the field from the start and offered her the task of being the first editor of this Institute’s new, free magazine, *Contentment*. She readily agreed. Dr. Hanna has been the Editor of *Contentment* since 2013. We have published 25 issues of this magazine over the past six years. We are grateful for all that Dr. Hanna has done. My prediction about her rang true, as the demand for her speaking engagements and corporate consulting have monopolized her time until she said that she was looking for a new Editor for *Contentment*.

I had a couple of Editors in mind and one was ready to pick up the reigns when I was chatting with my predecessor and mentor, Dr. Paul Rosch. It seems this man will not go gently into the night. While he has accomplished more than dozens of men combined, Dr. Rosch is still editing books and even gave four lectures including the keynote address at the 5th Annual International Conference on Advanced Cardiac Sciences in Saudi Arabia this year. As a cardiologist and a man who has devoted his life to Selye’s unified theory of disease, which meant treading far off the beaten path, Dr. Rosch knows about the heart and has demonstrated how big his heart is countless times. When I told him that I was looking for an Editor for *Contentment*, we had a brief discussion about it and he said he would like to assume this task.

Dr. Rosch published his unique and often astonishing monthly newsletter, *Health and Stress*, for 28 years, sending them in the mail until the internet arrived. They remain available to AIS Members in our archives. I did not expect Dr. Rosch to leave the comfort of retirement to grace our magazine, but that is exactly what he did. I was and remain giddy and so very glad that he took the job. To me, he is the

---

*Do not go gentle into that good night,*
*Old age should burn and rave at close of day;*
*Rage, rage against the dying of the light.*

*Though wise men at their end know dark is right,*
*Because their words had forked no lightning they*
*Do not go gentle into that good night.*

*Good men, the last wave by, crying how bright*
*Their frail deeds might have danced in a green bay,*
*Rage, rage against the dying of the light.*

Dylan Thomas, 1914–1953

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Summer 2019 | CONTENTMENT The American Institute of Stress | www.stress.org
Yoda of stress sciences and practice. If you have not yet read *A Personal Appraisal of Hans Selye & The Origin and Evolution of the American Institute of Stress*, run, don’t walk, to our store to buy it. Institute Members get it free, so consider joining us to get this book, along with many other perks, while supporting this nonprofit institute. This includes access to those 28 years of *Health and Stress* issues which are worth the price of admission on their own. I know some of you will feel compelled to read all of them after you read this issue of *Contentment*.

After we shook on it, the first thing that Dr. Rosch asked me in assuming his new role was to describe what kind of a magazine we want. I told him exactly what I told Dr. Hanna and Dr. Platoni, the Editor of our *Combat Stress* magazine when they started; that he should make the magazine in his image. So here we are, back to change. Starting with this, the 26th issue of *Contentment*, things will surely be a lot different. In this issue, Dr. Rosch reintro- duces himself as a classical medical writer, always focused on history and science. He wrote this theme issue himself because, after all, who can be paired with Yoda?

Personally, I love medical history because I am a futurist but not a psychic. That being said, I like to view modern medicine as a journey along a path, not having achieved any endpoints yet. I was a philosophy major focusing on 17th century philosophy for my first three years of college, so if you ask me who my favorite author is, my answer is easy: it’s Paul Rosch, of course! So, sit back and make yourself comfortable, perhaps brew a cup of tea, and sit in your favorite comfy chair to read Dr. Rosch as he takes you on an epic journey into the relationship of diet and stress, going all the way back to Hippocrates.

You will also notice that we added a Contributing Editors Board to the masthead of this magazine. Dr. Rosch will return to his position as Editor in future issues, relying on our Contributing Editors’ articles on the scientific basis of various aspects of stress, along with concepts in clinical and personal stress management. These authors will have the benefit of Dr. Rosch’s editing, and perhaps mentoring, to make this magazine as diverse and engaging as it can be. I am looking for a few more dedicated Contributing Editors among our Diplomates and Fellows. If you are qualified and interested, please email me at dkirsch@stress.org. We are happy to cover the annual dues for our credentialled Members who are willing to contribute in this way. I would love to hear your thoughts on this issue too. Perhaps we will publish some of your comments in the next issue.

Embrace the change. This is eustress.

*Daniel L. Kirsch, PhD, FAIS*

*Editor-in-Chief, Contentment Magazine*  
*President, The American Institute of Stress*
Are There Stress Reducing Foods And Diets?
“If you feed a cold, you will have to starve a fever.”
“Let food be thy medicine and medicine be thy food”
-Hippocrates

Although usually referred to as “The Father of Medicine” not much is known about Hippocrates, a highly respected 4th century B.C. Greek physician. Since none of his original writings have been preserved, all that is attributed to him is apocryphal and written centuries later based on information from subsequent Arabic and European physicians who adhered to his precepts. He is best known for his Hippocratic oath that required a new physician to swear to uphold specific ethical standards, which is still taken by many in a revised form when graduating from medical school.

He appears to have been a keen observer, and often prescribed exercise since he observed that people who walked more were healthier and lived longer. He taught that it was more important to know the patient, rather than what disease they had, and evaluated their personalities, home environment, relationships, diet, and demeanor before treating them. He recognized that people who were obese died more rapidly than others who were thin, and that those who ate mostly fresh, plant-based foods had fewer diseases. His treatment usually focused on dietary improvements, which emphasized the importance of fresh fruits, vegetables, grains, nuts, and sprouts.

As will be seen, similar diets have been recommended to reduce stress, and “Let food be thy medicine” has been revised several times over the years. In the ninth century, the Persian physician Al-Razi, often referred to as the “Arabic Galen”, advised “As long as you can heal with food, do not heal with medication.” In his 1826 *Physiologie du Gout, ou Meditations de Gastronomie Transcendante*, epicure Anthelme Brillat-Savarin wrote, “Dis-moi ce que tu manges, je te dirai ce que tu es.” (Tell me what you eat, and I will tell you what you are). In 1866, the German philosopher Ludwig Andreas von Feuerbach, proposed “Der Mensch ist, was er isst“(Man is what he eats), and a half century later, the nutritionist Victor Lindlahr coined “You are what you eat”. He subsequently developed his catabolic diet to promote health and reduce weight. As he explained in his 1942 *You Are What You Eat: how to win and keep health with diet*, catabolic foods are those that allegedly require more energy for you to digest and absorb than the calories they contain.

Catabolic foods included fruits (apples, raspberries, watermelon, lemons, strawberries, nectarines, cherries and grapes), vegetables (lettuce, spinach, asparagus, corn, tomatoes, carrots and broccoli) and seafood (cod, shrimp, clams and mussels). Salt, sugar, refined carbohydrates, meat and processed foods should be avoided, have breakfast, lunch and dinner every day, eat raw celery between meals if you feel hungry, and drink large amounts of water, but only 30 minutes before or after meals, not when you’re eating. Lindlahr claimed that adhering to this would reduce stress, promote health, and also weight loss, even if you ate more.

The one mindful living tip I would give is to be aware and develop insight into the stress produced by our daily activities and then – if possible – try to mitigate the stresses as much as possible.
Since then, there have been numerous books about diets, foods and supplements to lose weight, promote health and reduce stress, with at least 120 books on the food-mood connection, including the following:

- *Nutrition Essentials for Mental Health: A Complete Guide to the Food-Mood Connection*
- *Nutrition Essentials for Mental Health and The Good Mood Kitchen, Two-Book Set*
  - *Nutrition and Mental Illness: An Orthomolecular Approach to Balancing Body Chemistry*
  - *Nutrition and Mental Health*
  - *Nutrient Power: Heal Your Biochemistry and Heal Your Brain*
  - *Herbal Remedies for Radiant Health at Every Age and Stage of Life*
  - *Holy Herbs: Modern Connections to Ancient Plants*
- *The Mind Guide to Food and Mood*
- *Eat Right, Feel Right: Over 80 Recipes and Tips to Improve Mood, Sleep, Attention & Focus*
- *The Food-Mood Connection: Nutrition-based and Environmental Approaches to Mental Health and Physical Wellbeing*
- *Health, Anxiety, Depression, Disease & Trauma. Mindfulness, Holistic Therapies, Nutrition & Food Diet*
- *Nutritional Treatments to Improve Mental Health Disorders: Non-Pharmaceutical Interventions for Depression, Anxiety, Bipolar & ADHD*
- *The Mind-Gut Connection: How the Hidden Conversation Within Our Bodies Impacts Our Mood, Our Choices, and Our Overall Health*
  - *The Anti-Anxiety Diet: A Whole-Body Program to Stop Racing Thoughts, Banish Worry and Live Panic-Free*

The problem is that these all make different claims. You can find support for almost any theory on what’s “good” or “bad” to eat on the Internet, most of which emphasize the benefits of fruits, vegetables, nuts and seafood. *The Mind Guide to Food and Mood* recommends reducing stress and improving your mood by eating oily fish like sardines, tuna or salmon rich in omega-3 fatty acids, with a salad of lettuce, avocado and pumpkin seeds, followed by stewed fruit with dried apricots and bananas on an oatcake biscuit base topped with walnuts. It explains that this combination of foods releases sugars slowly, in contrast to caffeine and chocolate that cause a prompt rise, followed by a dip, but does not cite scientific studies that confirm this.

In addition, this and other diets do not apply to everyone since we can respond differently to the same stimulus or food depending on genetic influences, allergies and sensitivities, have health problems that require specific medications, and other factors that need to be considered. Greens like kale, spinach, endive and brussels sprouts, as well as red cabbage, should be avoided if you are taking Coumadin (Warfarin). Excess kale and other cruciferous vegetables can interfere with thyroid function, and other foods should be avoided if you have gastro-esophageal reflux, ulcers, irritable bowel syndrome or gout. What’s sauce for the goose is not always sauce for the gander, and one man’s meat can be another man’s poison.
You can find support for almost any theory on what’s “good” or “bad” to eat on the Internet, most of which emphasize the benefits of fruits, vegetables, nuts and seafood.
Hippocrates, Galen And The Four Humors Theory

So how can you determine what diet or foods are best for you and what supplements you should take. There are a few rules that will be helpful, and here again, we can turn to Hippocrates. As indicated previously, he advocated treating the patient, rather than the disease, by anticipating Sir William Osler’s “It is much more important to know what sort of patient has a disease than what kind of a disease a patient has.” Hippocrates is credited with being the first physician to believe that diseases were caused naturally, not because of superstition and gods. He separated medicine from religion, by arguing that disease was not a punishment inflicted by the gods but rather the product of environmental factors, diet, and living habits. These should be addressed before administering any drugs. In many instances, only rest and immobilization were indicated since the body contains its own pharmacy to restore health, and we should rely on the vis medicatrix naturae (healing powers of nature) and “tincture of time”. Since nature was opposed to any excesses, the same remedy could heal in one dose but harm in a larger one, and he advised moderation in everything. Thus, he prescribed wine as part of a healthy diet and to reduce the pain of childbirth but recognized it could also cause gout when consumed in large amounts.

These and other Hippocratic teachings, especially his belief that health depended on a balance between the four humors (blood, phlegm, black and yellow bile) were promulgated and extended 600 years later by Claudius Galen, a brilliant second century Greek physician and philosopher. He was born in Pergamon (now Turkey), which was then a major center of learning. His father, who was very wealthy, wanted him to become a physician, and sent him to the finest schools, where he excelled. When his father died, Galen inherited a small fortune at the age of 19, and following the advice of Hippocrates, he visited various Mediterranean port cities over the next eight years to observe differences in how diseases, and especially wounds, were treated. He spent the last five years in Alexandria, which had the largest medical college and medical library in the world. He returned to Pergamon at the age of 28, where, because of his success in treating wounds, he was appointed physician to the gladiators of the High Priest of Asia, one of the richest and most influential men in the world. During the next four years, there were only five gladiator deaths, compared to sixty in his predecessor’s time.
Dietary Advice For Each of The Four Humors
- William Marshall,
The Foure Complexions. Engraving, 1662. Folger Shakespeare Library.
The maxim “All roads lead to Rome” implied that all activities and pathways lead to the center of things, and this was true in the Roman Empire, since all the roads radiated out of Rome. It was therefore natural for Galen to visit Rome to observe how medicine was practiced in “The Eternal City.” He arrived in 162 at the age of 33 but his approach to diagnosis and treatment contradicted the methods of leading Roman physicians, who resented him and were jealous of his reputation and achievements. Galen described them as unscrupulous thieves, more interested in money than healing and truth and returned to Pergamon. However, as word of his prowess in all medical matters continued to spread, he was summoned to Rome in 169 to serve as physician to Emperor Marcus Aurelius, who later described him as “first among doctors and unique among philosophers.” He spent the rest of his life in Rome as personal physician to two subsequent Emperors and writing over 500 treatises on medical and philosophic topics until his death in 207.

Galen was probably the most prolific writer in antiquity, and allegedly employed 20 scribes to record his thoughts, which resulted in treatises that totaled some 10 million words. More than two thirds of these Greek manuscripts were destroyed in a fire, but those that have been preserved in Latin, Arabic and other translations, provide an appreciation of his genius and the diversity of his interests. After the decline and fall of the Roman Empire in the 5th century, Europe was plunged into the Dark Ages, and people returned to believing that illnesses and recurrent plagues were a punishment from God, and the Church started to become increasingly powerful. Galen and Hippocrates were forgotten until the 11th century, when Latin translations of Islamic medical texts containing their teachings became incorporated into the curriculum of the Universities of Naples, Montpellier, Salerno, and subsequently other medical schools.
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REFERENCE
During the Middle Ages, the Catholic Church was the largest landowner in Europe and was extremely wealthy, since everyone paid a tenth of their income (or “tithe”) to the Church each year. The Pope was omnipotent and infallible, and used his power to excommunicate secular rulers and free their subjects from any oaths of obedience to them. In most instances, the Church exercised exclusive jurisdiction over a wide range of matters, including: incest, adultery, bigamy, usury, failure to adhere to oaths and vows, matrimonial cases, and legitimacy of children. All of these were dealt with according to Church or canon law established by papal pronouncements rather than secular courts.

The Pope presided over a highly sophisticated system of governance, law and finance. The secular church attended by the public consisted of regions governed by archbishops, and their territory was divided into dioceses that were administered by bishops. Bishops also acted as advisors to emperors and kings, who usually acquiesced to their demands and suggestions to avoid excommunication. The parish church was the basic unit, where priests heard confessions, performed baptisms and provided other sacraments. The institutional church consisted of the College of Cardinals, who selected the next Pope, as well as varied monastic, mendicant, and military orders. Monastic monks and nuns tended to isolate themselves from external distractions that interfered with their vows and prayers and were often self-sufficient. Mendicants (from the Latin mendicare, “to beg”) interacted with people by preaching, hearing confessions, and soliciting contributions. Military orders were composed of knights who participated in the Crusades to capture the Holy Land and convert Muslims to Christianity. The First Crusade was initiated and financed by Pope Urban II.

During the Renaissance, the Church also became the major patron of the arts, and supported Leonardo da Vinci, Michelangelo, Raphael and other artists and sculptors. By then, it dominated all other aspects of endeavor and life, including education and medicine. Although Galen was not a Christian, the Church accepted and embraced him because he referred to the Creator who had designed the human body, and therefore believed there was only one God. Galen also supported the Christian belief that that only humans had an immortal soul and proposed that passion and moral errors were diseases of the soul, not the body, and should be treated by priests. In order to treat a patient suffering from a diseased soul, it was imperative to immediately nullify or remove the passion or error, an approach that had a profound influence on the subsequent treatment of mental disorders. The Church became so infatuated with Galen, that it kept only his books and treatises in monastic and university libraries and destroyed all the others. It also controlled educating the public, since in many instances, only priests and monks could read and write, and told parishioners that Galen was the only doctor that could be trusted. Some believe this was because it was feared that if someone started to prove Galen’s ideas to be wrong, then others might start to question the existence of God. As a result, anyone who
Although Galen was not a Christian, the Church accepted and embraced him because he referred to the Creator who had designed the human body, and therefore believed there was only one God.

Andreas Vesalius, a 16th century physician had studied medicine in Paris, where he became skilled in dissection. His enthusiasm for understanding human anatomy, led him to plunder cemeteries for corpses to practice on, and in 1537, he was appointed Professor of Surgery at Padua University. He continued his dissections, and in 1543, published his seven volume *De humani corporis fabrica* (On the Fabric of the Human Body). It contained over 600 anatomical drawings, some of which clearly showed numerous errors Galen had made. For example, Galen believed...
that arteries carried the purest blood to higher organs like the brain and lungs from the left ventricle, while veins carried blood to the lesser organs such as the stomach from the right ventricle. This meant there had to be openings between the heart’s two ventricles, and Galen claimed to have found them.

Galen’s authority was so powerful and influential that he was referred to as “The Medical Pope of the Middle Ages”, so it is not surprising that over the next 1,400 years, all anatomists also claimed to find these holes, until Vesalius showed they did not exist. In his lectures and subsequent books, he noted numerous other errors. Galen claimed that the sternum of apes consisted of seven parts, and assumed this also was true for humans, whereas Vesalius demonstrated that there were only three parts. He also disproved the belief that men had one rib fewer than women, and noted that, unlike Galen’s findings, the fibula and tibia bones in the legs were larger than the humerus in the arm. He tried to soften the blow of these and other criticisms by explaining that all of Galen’s observations and were based on animals, especially apes, and were correct. However, the presumption that they applied to humans was wrong. Although his accusations could not be refuted, he was still severely castigated by the Church because they contradicted Galen. Holy Roman Emperor Charles V, who inherited a Spanish and Habsburg empire extending across Europe from Spain and the Netherlands to Austria and the Kingdom of Naples, as well as Spanish America, ordered a detailed inquiry. Although Vesalius was eventually exonerated, the attacks continued. It was later claimed that Vesalius had performed an autopsy on an aristocrat in Spain while the heart was still beating, and he was condemned to death by the Spanish Inquisition.

Philip II, who became King of Spain and Portugal in 1556 when his father, Charles V, abdicated, reviewed these new charges, and commuted the death sentence to a fine and a series of pilgrimages. Vesalius allegedly went on one to the Holy Land in 1564 as part of his penance and died at age 49 following a shipwreck in the Mediterranean when he was returning home. He was so in debt that a benefactor paid for his funeral.

As indicated, Vesalius did not agree with Galen’s views on how blood was distributed throughout the body but did not comment on this since he could offer no alternative explanation. Michael Servetus, a contemporary Spanish physician and polymath was very knowledgeable about mathematics, astronomy, theology, pharmacology medicine as well as human anatomy, since he also dissected humans when he was at the same Paris facility Vesalius attended. He was the first European to correctly describe the function of pulmonary circulation, which also discredited Galen, since it explained why there were no holes or directions between the two ventricles. He outlined this discovery along with his views on reforming Christianity in his 1553 book Christianismi Restitutio. It was considered to be blasphemous and heretical, and he was arrested, tortured and burned at the stake along with copies of his book. How the blood circulated was finally elucidated by William Harvey, a 17th century British physician who studied with John Caius, a former pupil of Vesalius. After obtaining his degree in 1602, he established a private practice, but also began to investigate how blood moved throughout the body. A well-trained anatomist he concentrated on the heart and dissected over 100 animals from dozens of different species.
believed that “vital blood” was made by the heart and flowed through the arteries to nourish the brain and lungs, whereas “nutritive blood” made by the liver, was carried by veins to muscles and organs, where it was consumed to provide energy.

Harvey calculated that this meant the liver would have to produce 540 pounds of blood daily, which was impossible. He showed that: the starting-point of circulation was the heart, not the liver; it was the contraction, not the dilatation of the heart that coincided with the pulse; that the pulse was not produced by the arteries enlarging and contracting as Galen claimed, but by filling up with blood with each contraction; there was no pulsation in the veins but rather a constant stream of blood from the periphery back to the heart; like Vesalius and Servetus had claimed, there were no holes or pores between the two ventricles; the action of the right and left auricles was the same with respect to the reception and propulsion of liquid, not air, since the blood on the right side, although mixed with air, was still a liquid; blood in the right ventricle is sent to the lungs, returns to the left atrium via the pulmonary veins, and is then sent into the arteries by the left ventricle and returns through veins that empty into the vena cavae, which empties into the right atrium, thus completing its circulation.

Harvey was forced to conclude that the heart does not continually produce new blood but rather circulates or “recycles” it. The path of return to the heart could only be the veins, and Harvey was able to prove this by applying pressure to the veins of the forearm. Although most of his discoveries were in place by 1613, and he had a draft of his book when he was appointed physician to King James I in 1618, he delayed publishing this for 10 years because he was aware of what happened to Vesalius and Servetus for disputing Galen and recognized that what he was proposing was even more heretical. In 1628 he finally published Exercitatio Anatomica de Motu Cordis et Sanguinis in Animalibus (An Anatomical Study on the Motion of the Heart and Blood in Animals), usually referred to as De Motu Cordis. By then he had gained the respect of King James, to whom the book was dedicated, and other close friends and eminent physicians in high places who could support him during the stormy controversy that would surely follow his “reinvention” of the body. Although he was not indicted for heresy, most physicians rejected the book because he could not explain how the arteries and veins met, and if organs did not consume blood, how did they and other parts of the body obtain nourishment? If the liver did not make blood from food, where did blood originate? Why was blood blue in veins and red in arteries? It would take two decades for Harvey’s colleagues to acknowledge his achievements. And it was not until 1661, long after Harvey died, that Marcello Malpighi discovered the capillaries that connected arteries with veins proving that Harvey was correct.

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Although Ancel Keys was not a physician or nutritionist, he was nevertheless featured on the cover of the January 13, 1961 issue of *Time* magazine, and was referred to in the media as "Mr. Cholesterol." The tremendous publicity given to his erroneous conclusions stimulated numerous attempts to reduce coronary disease by strictly reducing fat. None of these were successful. In the Prudent Diet study, one group ate corn oil and margarine instead of butter, cold cereal rather than eggs, and chicken and fish instead of beef. A control group ate eggs for breakfast and meat three times per day. A decade later, the results revealed that cholesterol levels of those on the Prudent Diet were lower than the control group eating eggs and meat, but there were eight deaths from heart disease in the Prudent Diet group compared to none in the control group.

Keys’ tremendous influence was illustrated in a 1984 *Time* cover story on why a high fat diet and high cholesterol were so dangerous. By 1999, it was quite clear that a high fat diet was not harmful, and in 2014, the cover story claimed fat had become “the most vilified nutrient in the American diet despite the scientific evidence showing it didn’t harm health or cause weight gain.” In a final effort to prove his point, Keys fed middle-aged men a very high cholesterol diet, but found that their blood cholesterol was no different than a control group who consumed less than half as much. In 1997, he finally admitted “There’s no connection whatsoever between cholesterol in food and cholesterol in blood. And we’ve known that all along. Cholesterol in the diet doesn’t matter at all unless you happen to be a chicken or a rabbit.”

As evidence that fatty foods and cholesterol had little to do with causing heart attacks, the focus shifted to LDL (low density lipoproteins) were the culprit, and these were labeled “bad” cholesterol. On the other hand, HDL (high density lipoproteins) were “good” cholesterol since they had a protective effect, as extolled in a 1988 *Time* cover story. This was based on the observation that people with high HDL were less likely to have heart attacks. However, Association Does Not Prove Causation, and trials with drugs that raised HDL levels had to be stopped because they were associated with increased heart attacks even LDL was also lowered.
Galen’s Legacy And His Dietary Recommendations

It is impossible to underestimate Galen’s effect and the four-humor theory on Western Medicine, which persisted well into the 19th century. “Bleeding” a patient back to health was based on the belief that menstruation purged women of “bad humors”. Galen had discovered that veins and arteries were filled with blood, not air as had been assumed. (The word artery means air pipe). Since he was unaware of the circulatory system, he believed blood could stagnate in various parts of the body, especially the extremities. Because blood was the dominant humor and required the most control, he provided precise instructions on the best way to remove excesses based on the disease, its location in the body, and whether it should be arterial or venous blood, which he recognized were different. He created a complex formula of how much blood should be removed based on the patient’s age, disposition, the season, the weather and other factors like the vessel’s presumed link to the affected organ, thus, a vein in the right hand would be let for liver problems, whereas one in the left hand was used for disorders of the spleen. Applying heated cups and leeches to affected parts of the body to draw out blood were also employed and continue to be popular remedies in some cultures.

Like Hippocrates, Galen believed that mind and body were inseparable and that physical diseases could be related to emotions and mood that resulted from an imbalance of the four humors. Depression was due to an excess of black bile (Gr. mélas chole), which is the origin of melancholy. In De Tumoribus, his treatise on tumors, he observed that melancholy women were particularly prone to the development of cancer of the reproductive organs. Several studies over the last two centuries have confirmed a higher incidence of cancer of the breast and cervix in women who are depressed. Disturbances in the other humors were associated with different diseases and dispositions, and vestiges of these beliefs still survive when we describe someone’s personality as being sanguine, phlegmatic, bilious, or melancholy. Each temperament carried its own set of characteristics; sanguine people were thought to be ruddy and cheerful, phlegmatics pale and listless, bilious jaundiced and angry, and melancholics dark and sad, but often creative.

More importantly, each humor had a different quality that was characterized by some combination of heat, moisture, coldness, or dryness that correlated with the four basic elements of life, Air, Water, Fire and Earth. As a result, any imbalances could be corrected by eating foods that corrected this. A sanguine temperament (Air) was hot and moist, and such individuals were advised to eat melancholic foods and avoid basil, butter, sugar, lamb and peacocks. Since a choleric temperament (Fire) was hot and dry, phlegmatic foods should be eaten, and rice, mint, parsley cloves, capers, rosemary olives, rabbit, salt pepper, goat, oxen, garlic and onions should be avoided. A melancholic disposition (Earth) was cold and dry, and could be corrected by sanguine foods and from vinegar and lemons. A phlegmatic temperament was cold and moist (Water), responded to choleric foods, and omitting lettuce,

And it was not until 1661, long after Harvey died, that Marcello Malpighi discovered the capillaries that connected arteries with veins proving that Harvey was correct.
cucumbers, spinach, fish, pork and veal. The goal of balancing a person’s excess humor was to provide its dietary opposite. So, while sugar is dry, it actually warms and moistens, and although serving parsley to someone with an overabundance of phlegm would promote health, giving it to a choleric person could worsen his bilious temperament.

There is no way to be certain that these were all Galen’s views, since much of what we know about him comes from Arabic translations to Latin by physicians who exaggerated them, as well as Renaissance translations from Latin to other languages that provided other embellishments to increase their appeal.

A lot can be lost in translation, since the original English 16th century translation of “feed a cold and starve a fever” was actually “stave a fever”, as in “stave off” or “keep away”, by cutting off the fuel supply. In Galen’s day, fever was thought to be a disease rather than a symptom or sign, this maxim is still in common use today, although most experts believe you should feed both a cold and a fever.

There is much more that could be said, but this is already much longer than I anticipated, so we will discuss other relevant topics such as “Are There Stress Reducing Supplements?” and “Have Official Dietary Guidelines Done More Harm Than Good?” in a subsequent issue.

Dr. Paul J. Rosch is Chairman of the Board of The American Institute of Stress, Clinical Professor of Medicine and Psychiatry at New York Medical College, and Honorary Vice President of the International Stress Management Association. He completed his internship and residency training at Johns Hopkins Hospital, and subsequently at the Walter Reed Army Hospital and Institute of Research, where he was Director of the Endocrine Section. He had a Fellowship at the Institute of Experimental Medicine and Surgery at the University of Montreal with Dr. Hans Selye, who coined the term “stress” as it is currently used, and has co-authored works with Dr. Selye as well as Dr. Flanders Dunbar, who introduced “psychosomatic” into American medicine.

Dr. Rosch was elected President of The American Institute of Stress in 1978 and served in that capacity until 2013, when he became Chairman of the Board. He was also the 1998-99 President of The Pavlovian Society, an organization of distinguished international scientists devoted to integrating basic and clinical research, and has been the recipient of many honors, including the Outstanding Physician’s Award of the New York State Medical Society, Man of the Year Award with a Congressional Citation, the Schering Award, the International Distinguished Service Award of the American Rural Health Association and the annual Innovation Award of The International Society for the Study of Subtle Energies and Energy Medicine. In 1985, he received an award from Dr. Michael E. DeBakey, President of the American Society for Contemporary Medicine and Surgery for “contributions to our understanding of stress, health, and disease”. The I.M. Sechenov Memorial Medal was bestowed on him in by The Russian Academy of Medical Sciences for facilitating communication between stress researchers at his annual International Congress on Stress in Switzerland and he is one of the few foreigners elected to full Fellowship in this prestigious organization.

Dr. Rosch has served as President of the New York State Society of Internal Medicine, Chairman of the International Foundation for Biopsychosocial Development and Human Health, Expert Consultant on Stress to the United States Center for Disease Control, President, Westchester Diabetes Association, and President, Yonkers Academy of Medicine. He is a member of the Board of Governors of Northwood University, The American Academy of Experts in Traumatic Stress, Scientific Advisory Council of the Alzheimer’s Prevention Foundation, and Clinical Professor of Medicine in Psychiatry at the University of Maryland School of Medicine, and is on the International Advisory Committee, School of Psychology and Social Science, Universidad de Flores in Buenos Aires. He is a Fellow and Life Member of the American College of Physicians, Diplomate of the National Board of Medical Examiners, Emeritus Member of The Endocrine Society, Emeritus Member of The Bioelectromagnetics Society, Fellow of the Council of Epidemiology of the American Heart Association, Fellow of the Society of Behavioral Medicine, Fellow of the World Academy of Art and Sciences, and Fellow of The Royal Society of Medicine. He was editor-in-chief of Stress Medicine, published by John Wiley in the U.K. and is on the editorial board of several relevant journals. Dr. Rosch is Senior Consultant in Internal Medicine and Honorary Emeritus Physician at St. John’s Riverside Hospital in Yonkers, New York, and has a Workers Compensation Subspecialty Rating in Cardiology, Endocrinology, and Metabolic Diseases.
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