Power Amino Acids®

The Factor4 Advantage in Metabolic Health

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Power Amino Acids: The Factor4 Advantage in Metabolic Health
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Metabolic Syndrome, Obesity, and Accelerated Aging

The Metabolic Syndrome represents a continuum of metabolic disorders that range from type 2 diabetes with accelerated heart disease, to patients with heart disease independent from diabetes to normal individuals suffering from accelerated aging. Defining the syndrome was a breakthrough in understanding the causes of chronic degenerative disease and accelerated aging. The Metabolic Syndrome is now understood to be associated with a battery of major chronic degenerative diseases, all of which lead to accelerated aging and early death. These include overweight disorders and obesity; high blood pressure; high cholesterol and triglycerides; high blood sugar and type II diabetes; cardiovascular disease, including heart attack and stroke; a variety of cancers, including breast, prostate, endometrial, and colon; osteoarthritis; and liver-gallbladder disease.

Clinical Risk Factors

While the underlying causes of the syndrome are in dispute, the Mayo Clinic has identified the clinical signs or risk factors that point to the Metabolic Syndrome. The first is age. Fewer than 10% of people in their 20s suffer from Metabolic Syndrome, but 40% of people in their 60s do. A second is race. While the syndrome affects people of all races, it seems to pose a greater risk for Hispanics and Asians. The third is obesity. Overweight individuals with a body mass index greater than 25 are increasingly at risk of Metabolic Syndrome. People with a family history of type II
diabetes or a history of diabetes during pregnancy have increased chances of developing Metabolic Syndrome. Other risk factors include high blood pressure and cardiovascular disease, both of which are associated with an increased risk. A final factor is smoking, which increases insulin resistance and exacerbates the consequences of the Metabolic Syndrome.

Metabolic Syndrome puts people especially at risk of life-threatening coronary heart disease, stroke, and peripheral vascular disease. Among the consequences of Metabolic Syndrome are hyperglycemia, hyperinsulinemia, insulin resistance, and blood lipid disorders, including high triglycerides, low HDL cholesterol, and high LDL cholesterol. All of these risk factors contribute to inflammation and plaque buildup in artery walls, which contribute to atherosclerotic (plaque) disease.

**Diagnosis**

While there are no precise criteria for diagnosing the metabolic syndrome at the present time, the American Heart Association and the National Heart, Lung, and Blood Institute recommend that the metabolic syndrome be identified as the presence of three or more of the following components:

- Elevated waist size: for men, a circumference equal to 40 inches or greater; for women, 35 inches or greater
- Elevated triglycerides (150 mg/DL or greater)
- Reduced HDL (“good”) cholesterol: for men, lower than 40 mg/DL; For women, lower than 50 mg/DL
• Elevated blood pressure equal to or greater than 130/85 mm Hg
• Elevated fasting glucose equal to or greater than 100mg/dL

Treatment

Currently, the medical profession treats the risk factors associated with Metabolic Syndrome with pharmaceutical agents designed to treat individual symptoms. These may include weight-loss medications, blood pressure medications, cholesterol medications, insulin-resistance medications, anti-thrombotic medications, blood thinning agents, anti-depressant medications, sleep medications, and anti-anxiety medications. Unfortunately, many of these substances have interacting and cumulative side effects that can actually exacerbate the aging process associated with Metabolic Syndrome.

Doctors also recommend aggressive lifestyle changes, including increased physical activity, losing weight, and quitting smoking, all of which should help reduce blood pressure and improve cholesterol and blood sugar levels, three key measures of metabolic distress. They may also advocate specific dietary changes to address different aspects of the syndrome. Among these are reducing saturated fat intake to lower insulin resistance, reducing sodium intake to lower blood pressure, and reducing high-glycemic carbohydrates to lower triglyceride levels.
Continuum of Metabolic Disorders

As part of the Metabolic Syndrome, cardiovascular degeneration appears to be caused by disturbances in carbohydrate and fat metabolism that lead to a battery of metabolic abnormalities, including high blood sugar, high insulin, insulin resistance, high triglycerides, low HDL, and small, dense LDL particles.

These pathological conditions, all of which lead to atherosclerosis, appear to be operating in all of us. While those with Type II diabetes are further along the curve toward accelerated cardiovascular disease, everyone is moving along the same curve, some more rapidly than others. Seen in its full spectrum, the metabolic continuum defines a pathway from normal individuals to individuals suffering from Metabolic Syndrome to individuals suffering from Type II diabetes and/or cardiovascular disease.

There is increasing evidence that excessive carbohydrate consumption is a major cause of the Metabolic Syndrome. Despite the dedication of cardiologists over the past 60 years to the high fat/cholesterol hypothesis of Ancel Keys, the evidence increasingly points to high carbohydrate intake, not fat, as the culprit. Epidemiological studies have shown successful weight loss through dietary changes and examined the nutritional causes of the “diseases of civilization,” including obesity. Physiological studies have applied modern cellular and molecular biology techniques to the study of fuel distribution, storage, and energy utilization within the body. These support the conclusion that high carbohydrate consumption, not high fat consumption,
is a major contributor in the development of the Metabolic Syndrome.

The rate of “acceleration” of Metabolic Syndrome is known to be determined by multi-factorial processes related to genetic endowments, inherited from parents through long lineages of ancestor populations. In the case of existing disease, the rate of acceleration is also determined by good medical treatment. For example, numerous studies have shown that good management of blood glucose levels through the careful administration of insulin prolongs the life of diabetic patients.

What is less well recognized, however, is that the rate of acceleration of Metabolic Syndrome is also determined by nutritional factors in the diet. Indeed, regulating metabolic processes nutritionally can help avoid the secondary and tertiary consequences of carbohydrate as well as fat metabolism, both of which accelerate the aging process that is associated with the Metabolic Syndrome.
Public Enemy #1

Refined Sugars and Processed Carbohydrates

Most people think that the solution to obesity is simple: to lose weight, eat less and exercise more. It is no more complicated than that. Even government officials over the past 60 years have echoed this generalization: anyone who can’t lose weight is simply “undisciplined” and “poorly motivated.”

Why is it, then, that many individuals who struggle with their weight, regardless of age, eat no more than lean and healthy individuals? Often, they eat less!

Why is it that many individuals easily maintain their weight early in life and develop significant weight disorders only later in life without changing the amount they eat? In fact, most people, particularly as they age, have significantly greater difficulty in losing weight. A common complaint among older individuals is, “I am eating almost nothing and I cannot lose another pound!” The paradox is that many individuals cannot seem to lose any weight, no matter how little they eat. Or, if they do lose weight at the beginning of a diet, they gain it back over a very short period of time, sometimes even rebounding to a higher weight.

For many people, the answer is carbohydrates.

For years, the medical and nutritional establishments have advocated a diet high in carbohydrate and low in fat, even in the face of alarming evidence that these diets don’t work and, in fact, may hurt you. Now, carbohydrates are natural parts of the “normal” diet. They are found in fruits, grains, seeds, and an
enormous variety of foods that have always been part of the human diet. Because they’ve always been part of the diet, your body already “knows” how to deal with carbohydrates. Your body changes its digestive processes in response to the foods you eat.

It’s not that carbohydrates are inherently dangerous. In fact, by themselves, complex carbohydrates are not dangerous. It’s what your body does when you consume too many refined sugars and starch-rich foods compared to protein and fat. Just consider one example: insulin. Insulin is a hormone that is produced by the pancreas to manage blood sugar. The more carbohydrate in your diet, the more insulin your pancreas produces, and the more insulin your pancreas produces, the more your body stores fat and burns sugar. It’s a little more complicated than that, but the big picture is pretty clear: the more carbohydrates you eat, the more fat your body wants to store.

Humans have always eaten carbohydrates. Until recently, though, the carbohydrates we have eaten have largely been complex carbohydrates, unrefined and unprocessed. These carbohydrates contain starch, which consists of long chemical chains of hundreds to thousands of sugar molecules that take time to digest in the intestinal tract before the individual sugars are absorbed into the body. What makes today’s carbohydrates different is the extraction of sucrose from sugar cane, the extraction of glucose and fructose from corn syrup and the processing of whole grains to white grains whereby white starch is separated from brown husks containing protein and fiber. In contrast to complex carbohydrates, sugars found in sucrose or high-fructose corn syrup (HFCS) are rapidly absorbed into the blood circulation leading to excessive increases in blood sugar.
Furthermore, whole grains are healthier than white grains because digestion of starch is attenuated in the presence of insoluble fiber.

In contrast, simple carbohydrates may contain individual sugars (glucose and fructose) as found in HFCS or the disaccharide chains containing glucose and fructose as in sucrose extracted from sugar cane. These sugars are rapidly absorbed into the blood stream, where they stimulate storage of fat in depots covering the hips, butt, and waist—your hips, butt, and waist.

Sugar is among the simplest of carbohydrates. The greatest single disturbing change in the American diet over the past two centuries has been the dramatic increase in the amount of sugar the average consumer eats every year. In 1830, sugar consumption was about 15 pounds per year. By 1920, this had risen to about 100 pounds per person per year. In 2000, the average American consumed almost 150 pounds of sugar every year.

You may have heard of the “glycemic index,” (GI) which is a measure of the impact a particular food has on blood sugar 2 hours after you’ve eaten it. The GI of glucose is 100. The higher the GI of a particular food, the faster carbohydrates are digested and the greater the rise in blood sugar and insulin. Think about the GI of some common foods: white bread is 69; white rice is 72; corn flakes is 80. These are all relatively “modern,” processed foods. Compare them to the GI of an apple (39) your grandfather or grandmother might have eaten as a snack. Even ice cream, with a GI of 60, has less sugar impact than many of these everyday foods!

High fructose corn syrup (HFCS) is one example of the Faustian bargain between food processing and carbohydrates. This low-cost sugar substitute made from corn was introduced only in 1978. It revolutionized food processing. By 1985, fully half the
sugar consumed in the United States each year came in the form of HFCS. It is now found in hundreds of products in pantries everywhere, including sports drinks, fruit juices, low-fat yoghurt, and other products consumed by children and adults in copious amounts.

Although HFCS has been advertised as “safer” than sugar it is, in fact, more harmful than sugar because its sugar molecules (glucose and fructose) require no digestion and are more rapidly absorbed into the blood circulation than sucrose (cane sugar). HFCS actually causes more fat deposition than sugar; it elevates blood pressure; and it contributes far more rapidly to heart disease and diabetes.

Neither ordinary sugar—sucrose—nor high fructose corn syrup contains any nutrients other than sweet calories, and both are added in prodigious amounts to beverages and many foods. The difference between high fructose corn syrup (HFCS) and sucrose, which is derived from cane sugar, is that glucose and fructose are bonded into a disaccharide in sucrose, while they exist in free form in HFCS. This means that the two sugars are absorbed more rapidly from HFCS than from sucrose, which requires digestion to break the disaccharide bond before the two sugars can be absorbed into the body.

HFCS and sucrose are just two examples of how food processing has led to an excess of carbohydrate consumption. Wherever this has happened, the results have been tragic. Anthropology, epidemiology, and ethnology are filled with accounts of indigenous peoples who have suffered obesity and weight-related disorders only after adopting so-called modern diets built around white flour, white rice, potatoes, and sugar—lots and lots of sugar.
Over the past 50 years medical scientists have documented the toxicity of high sugar levels in the body. Refined sugars, in excessive concentrations, over prolonged periods of time, show deadly effects on human health. High levels of glucose lead to increases in insulin levels in the blood stream. Insulin blocks the metabolism of fat, which results in fat accumulation in fat pads. In this process, sugar-rich diets lead to uncontrolled hunger and uncontrolled weight gain through high blood sugar, high blood insulin levels, and insulin resistance. Insulin appears to be involved in fat transport into cells that line the arterial wall and a cascade of harmful effects, including free radical formation, oxidative stress, protein glycation, advanced-glycation-end-products (AGE) and inflammatory processes that ultimately lead to cardiovascular disease, including heart attack and stroke.

However, carbohydrate excess is only half the story. High-carbohydrate diets are usually low in protein and fat, and protein deficiencies cause additional health problems.
Public Enemy #2:

Protein Deficiency Syndrome

History has taught us that high-carbohydrate weight-loss diets with low amounts of fat and protein generally produce insignificant weight losses that range between 0 and 1.5 pounds per month, even though they drastically reduce the number of calories that may be consumed per day. By contrast, weight loss diets that increase protein and fat while minimizing carbohydrates produce impressive weight losses ranging between 8 and 12 pounds per month. Although these results would seem to be counter-intuitive, there are, in fact, a number of very good reasons for this dichotomy.

- Fat and protein diets are more satisfying because fat and protein have greater effects on appetite reduction. Furthermore, fat and protein digest more slowly, leading to more pronounced feelings of satiation.
- Carbohydrate diets are less effective at reducing hunger. Furthermore, because carbohydrates, and particularly refined sugars, are rapidly digested and absorbed into the body, they often cause food swings that increase appetite.
- Weight loss and hunger are not necessarily related to the absolute number of calories consumed.
- Satisfaction and weight loss are easier to achieve when carbohydrates are restricted.
- High-protein diets are much more effective at achieving weight loss without stimulating hunger.
- Diets with a high proportion of carbohydrates encourage both hunger and weight gains.
• Weight loss occurs with a high-fat, high-protein diet even when a greater number of calories are consumed.

If you think about it, this all makes perfect sense. Over the millennia, humans evolved while hunting and gathering food. They regulated energy metabolism mainly by regulating protein and fat intake. Humans were at the top of a food chain that was built largely around a process in which larger animals fed off smaller animals. In the beginning, the primary food source was game. Meat ingested from game consisted mainly of protein and fat.

**Importance of Protein**

In many ways, protein is the optimal source of nutrition and energy. It is totally self-sufficient, in that protein by itself supports the entirety of life. The same cannot be said for either carbohydrate or fat. Protein not only provides amino acids, the unique building blocks of life, but it also acts as a source of energy for metabolism. Protein simply cannot be replaced in the diet.

Protein is the primary and most important food staple of life for the following reasons:

• Protein is the only abundant food source that contains nitrogen, which is necessary for the body to function properly
• Protein provides the building blocks—amino acids—for both the positive-charged and negative-charged proteins that lead to supercharged health
Protein contains essential amino acids that mammals and humans cannot produce.

Protein can also be used as a fuel supply for energy, providing 4 calories per gram of protein.

The amino acids contained in protein can be converted into glucose and fatty acids, providing the necessary components for carbohydrate and fat synthesis.

In contrast, while carbohydrates and fatty acids can be used as sources of energy, they cannot be converted into amino acids.

Proteins are the “working units” of life, acting as the enzymes that drive metabolic pathways that synthesize and break down the organic molecules of life—the proteins, fats, and carbohydrates—that the body uses to build, maintain, and repair its cells, organs, and tissues. Indeed, proteins are responsible for all the active processes of life, including metabolism, movement, and thought. Because many proteins function as the enzymes that synthesize and degrade glycogen and fat, they also are critical for determining body weight.

A number of astute doctors have already called our attention to the importance of protein in the diet. A brief list of these doctors includes Dr. Robert Atkins (Dr. Atkins Diet Revolution); Dr. Bill Wheeler (The Gold Standard Protein); Drs. Michael and Mary Dan Eads (Protein Power); Dr. Barry Sears (The Zone Diet); and Dr. Arthur Agatston (The South Beach Diet). Many people have lost weight on their high-protein diets. Unfortunately, for reasons that are now becoming clear, much of the weight loss has been short-lived, and people have put the weight back on.
Essential and Nonessential Amino Acids

Humans require 20 amino acids to build proteins in the body. However, humans can only produce 11 of these amino acids. They cannot produce the other 9 amino acids. Thus it is necessary for humans to obtain the other 9 amino acids from the food chain. These 9 amino acids are called “essential amino acids” because it is essential that they are obtained from dietary sources, which we refer to as the diet.

However, higher food sources, including cows, chickens, and fish, also cannot produce these 9 essential amino acids. The purpose of the food chain is to move amino acids and other essential nutrients from plants and bacteria, which do make all 20 amino acids, up to higher animals, including vertebrates, mammals, and man. Thus, the food-chain is vulnerable or deficient in moving the 9 essential amino acids to higher animals. We call this the food-chain gap.

When food is plentiful, the food-chain gap is closed and higher animals achieve optimal health. However, when dietary deficiencies occur due to poor eating habits or the process of aging, the deficiency that occurs in essential amino acids results in a further deficiency in positive-charged proteins, leading to further imbalance in metabolic pathways. This imbalance upsets the processes that store and burn body fat. The result is overweight disorders and obesity.

Fortunately, FACTOR4 Weight Control® containing power amino acids®, has the capacity to close the food-chain gap and correct the deficiencies in amino acids, positive-charged proteins, and metabolic pathways. Once these deficiencies are corrected,
the restored balance in metabolic pathways stimulates the loss of body fat and produces sustained weight control.

Why are amino acids so important? Because your body is rebuilding itself every minute that you breathe. As part of this rebuilding process, your body uses amino acids as building blocks for the proteins and enzymes that regulate your metabolism. The rebuilding process also serves to repair the body from the deleterious effects of oxidation, aging, and other destructive processes.

**Power Amino Acids® and Protein Health Provide a Breakthrough Discovery in Weight Loss Health**

My breakthrough discovery in weight-loss health allows us to take a revolutionary step beyond the low fat/protein diets of public health policy and the high fat/protein diets of Dr. Atkins and other physicians. It shows us how to develop, for the first time, a low-fat and low-carbohydrate diet that produces significant weight loss without drastic reductions in carbohydrate intake, as recommended by Dr. Atkins, or hunger-producing starvation diets, as recommended by public policy officials.

The secret that this discovery revealed is that power amino acids® can be used to maintain anabolic/constructive health while at the same time achieving the feelings of comfort, satisfaction, and well-being that are associated with natural appetite suppression. Because of the power of amino acids to provide multiple benefits that correct deficiencies in amino acids, proteins, metabolic pathways, and dissatisfaction while improving weight loss health, Power Amino Acids® have patent-pending status and have been registered as a mark in the U.S. Patent and Trademark Office.
What Can You Expect When You Take FACTOR4?

You’ll notice some of the benefits of FACTOR4 and its power amino acids right away. But even when FACTOR4 is working in the background, you will be resetting your protein health, your metabolic pathways, and your nutritional health to increase fat metabolism. Your entire body will thank you! Just some of the benefits from FACTOR4 and power amino acids include:

- FACTOR4 and power amino acids provide you with anabolic building blocks for strong bones, ligaments, and tendons; healthy cartilage; strong muscles; healthy organs; and important energy reserves.
- FACTOR4 and power amino acids prevent your body from lapsing into the destructive catabolic states of extreme dieting characterized by food cravings, hunger pangs, eating binges, and unwanted weight gains.
- FACTOR4 and power amino acids suppress your appetite. Within 5 to 10 minutes, you’ll begin to experience comfort, satisfaction, and well-being, and these feelings will increase over time. These are the same feelings you experience after you’ve eaten a meal.
- FACTOR4 and power amino acids correct the deficiencies in amino acids, proteins, and metabolic pathways that produce unwanted weight gains. When these deficiencies are corrected you will begin to burn fat again.
- FACTOR4 and power amino acids supercharge your health and stimulate both weight loss and sustainable weight control. When you experience supercharged health, your “sweet-tooth” and your “fat-tooth” will naturally disappear,
and you will find it much easier to shift your diet away from harmful fats and carbohydrates and maintain a lean, attractive figure.

**FACTOR4 Weight Control® Suppresses Appetite to Optimize Body Weight**

FACTOR4 Weight Control® has strong effects on appetite suppression. This is because the essential and positive-charged amino acids contained in FACTOR4 Weight Control® function to signal satiety to the appetite centers in the brain and in the gut.

You’ll know appetite suppression. It is the feelings of “comfort, satisfaction and well-being” you’ll experience within minutes of drinking a FACTOR4™ power shake or smoothie. These feelings may continue for hours, allowing portion control or meal replacements without food cravings, hunger attacks, or famished states that otherwise might lead to eating binges and unwanted weight gains. In fact, within days of beginning to take two or more FACTOR4™ power shakes per day, most dieters lose their “sweet tooth” and their urges for carbohydrate-rich snacks.

The appetite suppression that accompanies FACTOR4 Weight Control® is significantly greater than that observed with protein shakes because of the time required for protein to be digested in the intestinal tract. The table below compares the differences in appetite suppression and absorption times of FACTOR4™ shakes and protein shakes.
**Power Amino Acids: The Factor 4 Advantage in Metabolic Health**

### Nutrient Absorption Time and Appetite Suppression

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Absorption time</th>
<th>Appetite Suppression</th>
</tr>
</thead>
<tbody>
<tr>
<td>FACTOR4 Weight Control® with Power Amino Acids®</td>
<td>5 to 10 minutes</td>
<td>++++</td>
</tr>
<tr>
<td>Whey protein shake</td>
<td>4 hrs.</td>
<td>+</td>
</tr>
<tr>
<td>Soy protein shake</td>
<td>6 hrs.</td>
<td>+</td>
</tr>
<tr>
<td>Casein protein shake</td>
<td>8 hrs.</td>
<td>+</td>
</tr>
</tbody>
</table>

**FACTOR4 Works!**

How do we know FACTOR4 works? We can compare the results from taking FACTOR4 Power Amino Acids with the results of a diet study reported in the prestigious *Journal of the American Medical Association* in March 2007. The JAMA study examined weight loss experienced from four popular diets: the Atkins diet, the national guidelines published by the National Institutes of Health, the Dean Ornish diet, and the Zone diet over a full year.

<table>
<thead>
<tr>
<th>Diet Plan</th>
<th>Weight Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Amino Acids (12 months)</td>
<td>33 lbs</td>
</tr>
<tr>
<td>Power Amino Acids (6 months)</td>
<td>21 lbs</td>
</tr>
<tr>
<td>Atkins (12 months)</td>
<td>10 lbs</td>
</tr>
<tr>
<td>National Guidelines (12 months)</td>
<td>6 lbs</td>
</tr>
<tr>
<td>Dean Ornish (12 months)</td>
<td>5 lbs</td>
</tr>
<tr>
<td>Zone (12 months)</td>
<td>3.5 lbs</td>
</tr>
</tbody>
</table>
The FACTOR4 Study

We studied a group of 25 obese males and females over a 3-month period to determine how effective The FACTOR4 Diet was in reducing body weight and fat. All of these people had been obese for at least 10 years and some for as long as 25 years. Most had tried and failed to lose weight in the past, regardless of the weight-loss products they had used or the diets they had followed. One person had tried more than 25 diets and 6 weight-loss medications over the previous 20 years. This was truly a challenging group!

The results were more than impressive! Twenty-four of the 25 subjects lost weight during the 3-month period. We extended the study to 6 months and then to a full year. All of the subjects who stayed on the program continued to lose significant amounts of weight. Better yet, all of them also reduced their percentage of body fat and their body mass index.

Since this initial study was completed, we have given FACTOR4 Power Amino Acids to more than 400 additional overweight and obese patients. The results have confirmed our initial study. In fact, the more FACTOR4 Power Amino Acids patients consumed, the more weight they lost. Committed patients who exercised portion control and selective meal replacements lost up to a pound every two days without experiencing the discomforts of hunger. Unlike so many diet programs that work for a while and then stop working, FACTOR4 Power Amino Acids continue to work for as long as people need to lose excess weight.
Many people believe that protein is protein and that they can solve their protein deficiencies simply by increasing the amount of high-protein foods in the diet. After all, these high-protein foods are readily available in abundance in grocery chains throughout the advanced world. That’s not necessarily the case.

- Many of these high-protein foods also contain fat, and particularly saturated fat. This may be an important reason why high-protein diets ultimately fail: they contain too much fat for long-term consumption unless intense exercise routines are performed.
- High-protein foods almost always come from muscle tissue in livestock, chicken, or fish. As we have seen, this muscle tissue cannot provide the full range of amino acids that your body requires for optimal health and weight control. To obtain a complete balance of amino acids from meat sources, you’d have to eat far more calories than you could possibly burn.
- High-protein foods are relatively expensive. In the farming industry, it costs far more to raise livestock than to grow vegetables. Livestock and meat products are more difficult to handle, more difficult to store, and, because they are perishable, more difficult to sell at a profit.

Other people turn to protein shakes to supplement their diet. Protein powders made from whey, casein, egg white, and soy don’t have the fat calories that high-protein foods do, and they do
bring protein levels up to the USDA recommendations. However, they, too, have their limitations.

- It takes between 2 and 8 hours of protein digestion before their amino acids can be absorbed into the bloodstream. Because of the time it takes for the amino acids to be absorbed, amino acid levels in your bloodstream may never reach the levels required to suppress your appetite, and you may actually need to exercise intensely to keep from gaining weight.
- All protein supplements need to be enriched with essential and positive-charged amino acids. None of these protein supplements contain the correct balance of amino acids. In fact, while protein powders do improve your nutrition and health, they are often better suited for weight gain and muscle building than for weight loss.

FACTOR4 overcomes the limitations of high-protein foods and protein shakes. At the same time, it provides a number of additional benefits:

- FACTOR4 does not cause the problems associated with the fat in high-protein foods
- FACTOR4 contains a full spectrum of amino acids and corrects deficiencies found in natural food products
- FACTOR4 contains amino acids that are quickly absorbed into the bloodstream and promote rapid appetite suppression
• FACTOR4 costs no more than protein supplements, and it is considerably less expensive than high-protein foods in grocery stores and restaurants

Appendix I presents the many ways that FACTOR4 Weight Control® may be added to existing weight loss strategies to improve results and ensure success. These topics are discussed under the following headings:

• Add FACTOR4 Weight Control® to any diet plan to improve results and ensure success
• Add FACTOR4 Weight Control® to any weight-loss meal program to improve results and ensure success
• Add FACTOR4 Weight Control® to any weight-loss product to improve results and ensure success
• Add FACTOR4 Weight Control® to any vegetarian diet to improve health
• FACTOR4 Weight Control® combats eating disorders while maintaining body health and shape

Review these summaries in Appendix 1 to learn the top 10 reasons why FACTOR4 Weight Control® will ensure success in each of these weight loss goals.

Appendix II presents the many ways that Power Amino Acids® constitute the newest, safest, and most effective dietary supplement in today’s market.

Learn how Power Amino Acids® are light years more effective than either vitamins or antioxidants in providing positive benefits to core body health in the following health-care areas:
• The four cornerstones of health
• The four major benefits in weight loss health
• The Top 20 general health benefits of FACTOR4 Weight Control®
• The Top 50 ways you will feel better in the 8 major health systems in the body
The FACTOR4 Diet Plan

The secret to successfully controlling body weight and living a healthier life may be adding something to—rather than subtracting something from—your daily diet. The FACTOR4 diet does exactly that. We formulated FACTOR4 Weight Control® to deliver power amino acids®, protein, vitamins, minerals and micronutrients to the human body. The power amino acids contained in the formula will help you reach your weight loss goals while you maintain optimal body health without diets, meal programs, or weight loss drugs. It does this in a variety of ways:

- FACTOR4 rebuilds your body with power amino acids, the essential ingredients for supercharged health
- FACTOR4 corrects the deficiencies in amino acids, proteins, and metabolic pathways that cause overweight disorders and obesity in the first place
- FACTOR4 suppresses your appetite and blocks food cravings, hunger pangs, and eating binges
- FACTOR4 turns off your desire for the refined sugars and starch-rich foods that increase your appetite and pump your body with empty calories
- FACTOR4 resets your body processes from fat storage mode to fat burning mode

FACTOR4 does more than help you lose weight. It relies on nature’s own processes to improve your overall health and vitality:

- FACTOR4 improves metabolic health in all the major health systems of your body
• FACTOR4 revitalizes youthfulness and gives you new-found pep, energy, stamina, and endurance
• FACTOR4 improves your quality of life and boosts your feelings of comfort, satisfaction, and well-being
• FACTOR4 provides supercharged health and converts many of the destructive processes associated with aging into constructive processes you remember from your youth

When you follow the FACTOR4 program, you will lose weight. Highly motivated people can lose up to 1 pound every 2 days. Don’t be disappointed if you don’t see results quite that dramatic. Remember that it took years for you to gain those excess pounds. It will take time for you to lose those pounds and regain the weight and physique that you once had. But be assured: you will succeed.

Endpoints for Monitoring Weight Loss Success

Benefit 1: Comfort, Satisfaction and Well-Being

Drinking power shakes or smoothies with FACTOR4 Weight Control® containing Power Amino Acids® will give you feelings of comfort, satisfaction and well-being within minutes. When you recognize these feelings, you’ll experience that FACTOR4™ effectively suppresses your appetite, food cravings, hunger pangs, and famished feelings.

Within a few short days, you will lose your “sweet tooth” and your “fat tooth,” which means you will lose your cravings for sweets and fats.
Benefit 2: Increased Energy

Within one to two weeks of starting on FACTOR4 Weight Control® with Power Amino Acids®, you’ll notice that you have significantly more pep, energy, activity, stamina, and endurance. These states of increased energy indicate that significant changes are occurring in the metabolic pathways of your body. Changes in your metabolism will produce increases in your muscle tissue (anabolic state) and decreases in your body fat. Since muscle tissue is the most important organ for burning off body fats, these two processes work together to reset your body weight and energy.

Benefit #3: Loss Of Body Fat

The first sign that your body is losing fat deposits is that your clothes will fit better. The second sign that you are losing body fat is when your weight decreases according to the weight scale. However, your weight according to the gravimetric scale will not decrease until after your muscle tissue is built up. This may take several weeks or a month depending on your body type. See below for more information on body type and weight loss.

The Importance of Body Type

You may not see immediate results on the scale. FACTOR4 begins by replacing your fat with muscle, and muscle weighs more than fat. You are likely to see results in the mirror first. In fact, the first sign that you are losing fat is that your clothes fit better. Your actual weight may not decrease until after you begin developing muscle tone. This may take several weeks or even a month, depending on your body type. Furthermore, fat disappears first
from the extremities (arms and legs) and only later from the abdominal region. Trust FACTOR4.

How long will it take for you to begin to see results on the scale? The chart below will give you a general idea.

<table>
<thead>
<tr>
<th>Body type</th>
<th>Metabolic Rates &amp; Activity Levels</th>
<th>Time needed to rebuild your body with Power Amino Acids</th>
<th>Weight loss begins in</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 1</td>
<td>Rapid metabolism Physically active</td>
<td>1 week</td>
<td>Week 2</td>
</tr>
<tr>
<td>Type 2</td>
<td>Rapid metabolism Physically inactive</td>
<td>2 weeks</td>
<td>Week 3</td>
</tr>
<tr>
<td>Type 3</td>
<td>Slow metabolism Physically active</td>
<td>3 weeks</td>
<td>Week 4</td>
</tr>
<tr>
<td>Type 4</td>
<td>Slow Metabolism Physically inactive</td>
<td>4 weeks</td>
<td>Week 5</td>
</tr>
</tbody>
</table>

The key qualities of the FACTOR4 diet are persistence and patience… and FACTOR4 Weight Control®! The rewards are significant weight loss without painful exercise routines or boring dietary regimens and sustained weight control for the rest of your life!

**Join the FACTOR4 Health Club™**

Join the FACTOR4 Health Club™, at no added cost, to ensure that you achieve weight loss, sustained weight control, and metabolic health. The FACTOR4 Health Club™ is a continuity program that will help you supercharge your health with the following promise: By committing to FACTOR4 Weight Control® daily, you will *Look Younger Every Day* and *Feel Better in Every*
Way! When you join the FACTOR4 Health Club™, you will receive two containers of FACTOR4 Weight Control® each month plus the following benefits of membership:

- With your first order of FACTOR4™ you receive, FREE OF CHARGE, your own personal Weight Loss Guide that explains how you can achieve Optimal Weight and Metabolic Health 4 Life™, a $14.95 value.
- When you join the FACTOR4 Health Club™ as a continuity member, you will receive, FREE OF CHARGE, your own blender bottle to make perfectly smooth, nutritious FACTOR4™ power shakes in your kitchen or on the go, an $8.95 value.
- Go to www.FACTOR4health.com and create your own personal profile, including Body Mass Index (BMI), and receive guidance on how to identify your weight loss goals and define your road map to weight loss success, ABSOLUTELY FREE.
- Share your experience with like-minded individuals who are interested in losing weight and regaining supercharged health for revitalized youth and anti-aging health with improved quality of life. Learn from others in your age group and share your personal success too, ABSOLUTELY FREE.
- By committing to FACTOR4 Weight Control® in a continuity program, you will lose excess weight and feel better in up to 50 ways in the 8 major health systems of the body, as listed below!
How to Use the FACTOR4 Diet Plan to Lose Weight NOW

This is the section you’ve been waiting for. Here is where we make the transition from the *why* to the *how* of weight loss and weight control. Here is where you learn how simple, sensible, and intuitive weight management strategies can lead to metabolic health and weight control. That doesn’t mean weight loss is *easy*. It takes attention, dedication, and structure, and it may seem like it involves sacrifice. Keep the goal in mind; hold on to that picture of a thin, healthy you in the mirror. Be patient. The results will make it all worthwhile. You’ll look back when it’s all over and wonder why you waited so long to take care of yourself. So, let’s get started!

The FACTOR4 weight management program combines time-tested diet and weight-loss principles and state-of-the-art innovations for shedding pounds and keeping them off. It is based on common-sense principles:

- Eat the right foods to ensure a sound nutritious diet
- Select the right exercise routine to keep your body in shape
- Take FACTOR4 Weight Control® at least twice every day!

The FACTOR4 Diet is easy to stay on because it gives you all the nutrition you need while it provides you with the sense of satisfaction and fullness that other diets don’t. It does require your commitment and your perseverance. But it makes weight loss manageable and spares you the hunger pangs, the discomfort, and the demand for Herculean “will-power” that so often ruin the
best dieting intentions. Before you know it, you’ll be wondering why losing weight was so difficult in the past.

**FACTOR4 Weight Control®: The Key to Weight Loss Success**

The FACTOR4 Diet™ is designed to restore your protein health. As a result, it emphasizes not just the amino acids that are found in protein, but the correct balance of essential and non-essential amino acids that your body needs for you to manage your weight.

Many of these amino acids—the *essential* amino acids—can be obtained only from the diet. We have seen how the modern diet places taste and convenience above health. That is why we developed FACTOR4 Weight Control®, a delicious, low-calorie, nutritious supplement designed to fill in the gaps left by the typical diet. Formulated with power amino acids, health-plus proteins™, vitamins, minerals, and fiber, FACTOR4 Weight Control helps promote weight loss, burn fat, and stimulate nutritional health.

FACTOR4 Weight Control® is the key to the FACTOR4 Diet. It is a convenient powder you can blend with water, low-fat milk, soy milk, fruit juice, or other liquid to make FACTOR4 power shakes. You can sprinkle it on fruit or yogurt for an elegant topping. You can put it in the blender with fruit and liquid to make delicious smoothies. You can use FACTOR4 Weight Control in place of snacks and junk food.

Appendix III provides a number of delicious recipes for FACTOR4 power shakes, smoothies, snacks, breakfasts, desserts, and meal replacements, as well as both hot and cold drinks.
Best of all, you can customize FACTOR4 Weight Control for your own needs, goals, and body type. You don’t need to buy prepackaged foods. You use FACTOR4 Weight Control as an adjunct to your regular diet. Of course, you do need to eat intelligently. But you don’t have to sacrifice control over your menu just to stay on the program.

FACTOR4™ works first to restore your nutritional health and switch your body from the fat-storing mode encouraged by the modern diet to the fat-burning mode promoted by FACTOR4 Weight Control® that leads to weight loss and vitality. Because it rebuilds your body and nutritional health first, The FACTOR4 Weight Control program may not produce immediate results on the scale. Depending on your body type, it may take as long as a month for you to actually lose weight. But keep the faith. You are replacing fat with muscle, and muscle weighs more than fat. If you want immediate feedback, look in the mirror. Your clothes will fit better and you will begin looking better well before you see changes on the scale.

Four Power Levels of Commitment to FACTOR4 Weight Control®

You cannot overdose on FACTOR4 Weight Control. In fact, the more FACTOR4 Weight Control you take, the more weight you will lose. Your success in weight loss is limited only by your goals and not by your age, gender, genetic profile, exercise level, or metabolic rate. For this reason, we have developed four weight-loss profiles to fit the needs of almost everyone who follows the FACTOR4 diet. Choose the power level that best fits your goals, and get started today!
Power level 1 (Snack Control): Take FACTOR4 twice a day to curb your appetite and maintain your nutritional health. Mix up power shakes instead of snacking on carbohydrate-loaded foods like candy, chips, pastries, and ice cream. FACTOR4 works immediately to block food cravings, hunger pangs, famished states, and eating binges.

Power level 2 (Portion Control): Take FACTOR4 before or with meals. This will help you control portion size and minimize your calories. FACTOR4 makes it easy to eat less food, reducing the number of calories you eat all day without enduring aggravating pangs of hunger.

Power level 3 (Meal Replacement): Take FACTOR4 as a meal replacement once or twice a day. This will reduce your calorie intake even further. For dinner enjoy protein (fish, chicken, lean beef, or vegetable protein) and two colored or leafy vegetables. The nutrients in FACTOR4 will keep you energized and satisfied while you consume much fewer calories.

Power level 4 (Boot Camp): Take FACTOR4 at 3 to 4 hour intervals throughout the day. This will maximize the burning of fat while minimizing the carbohydrates and fat that add pounds. Take FACTOR4 Weight Control 5 to 8 times a day (for women and men, respectively). To vary the program, eat a large salad every day, containing only fresh vegetables, such as lettuce, tomatoes, onions, carrots, peppers, mushrooms, and green leafy vegetables. Because power level 4 is aggressive, you may want to consult with your doctor if you plan to stay on this power level for more than 2 weeks.
How to Select the Power Level That Is Right for You

The secret to effective weight loss and sustained weight control is to vary the power of the FACTOR4 weight management program to match your needs and your weight loss goals.

If you are younger and want to lose 5 to 10 pounds, you may achieve your weight loss goals by committing to FACTOR4 Power Level 1.

If you are slightly older and desire to lose 15 to 25 pounds, you may achieve your weight loss goals by committing to FACTOR4 Power Level 2.

If you desire to lose 30 to 50 pounds, you may achieve your weight loss goals by committing to FACTOR4 Power Level 3.

If your goal is to lose more than 60 pounds, you may achieve your weight loss goals by committing to FACTOR4 Power Level 4.

The Power Chain of FACTOR4 in Weight Control

Once you have lost your excess weight, you can move down the power chain to a lower value. For example, if you have selected power level 4 to lose 80 pounds of weight over a 6 month period, you may be able to move down the power chain to power level 3, then power level 2, and finally to power level 1 as your weight loss and weight control goals are achieved.

Naturally, if you begin to gain weight back again, you can move up the power chain to levels 2, 3 or 4 to block further weight gain, reverse the undesired trend in your body weight, and again achieve weight loss health.

The real secret of FACTOR4 Weight Control® is that it contains the essential nutrients (power amino acids®, vitamins, minerals and micronutrients) that you need to reset metabolic pathways
and turn on your fat-burning metabolism without resorting to
the starvation mechanisms that harm the body by destroying
the vital organs and muscle tissue that you need for optimal
health.

With your ability to move up and down the FACTOR4 power
chain, replacing one power level strategy with another to offset
unwanted shifts in body weight, you can use FACTOR4 Weight
Control® to regulate your body weight without causing the
catabolic (destructive) effects that popular diets and weight loss
gimmicks have on your metabolic health.

**Four Power Bonuses with FACTOR4 Weight Control®**

FACTOR4 Weight Control® provides 4 nutritional bonuses
that further stimulate weight loss and make sustained weight
control easier:

- FACTOR4 Weight Control® suppresses appetite by abolishing
  food cravings, hunger pangs, famished states and eating
  binges.
- FACTOR4 Weight Control® corrects amino acid and protein
deficiencies that reset metabolic pathways to burn fat.
- FACTOR4 Weight Control® provides essential nutrients that
  rebuild the body with the anabolic potential of youth.
- FACTOR4 Weight Control® serves a delicious nutritional drink
  which helps meet daily nutrient and fluid requirements that
  increase energy levels without the harmful effects of refined
  sugars, caffeine and alcohol.
Time-honored Principles of Dietary Health

In addition to reviewing the FACTOR4 Diet Miracle that will allow you to lose significant weight with Power Amino Acids®, it is important to review some of the time-honored dietary principles that still apply in your quest to achieve better health. Let’s first consider the major food categories.

Protein

Get your protein from a variety of sources. Most people think they have to eat huge amounts of meat and eggs to get protein. As a matter of fact, it is not necessary or even desirable to eat meat everyday, especially when you are also taking FACTOR4 Weight Control. Many cuts of chicken, turkey, beef, lamb, and pork contain high amounts of saturated fat and cholesterol. Other excellent sources of protein are low-fat dairy products, seafood, and many plant foods, such as spinach and legumes.

Legumes—beans, lentils, and peas—contain no cholesterol and little fat. They also make great complementary side dishes, allowing you to eat smaller portions of meat and poultry. Unlike meat, beans help reduce LDL (bad) cholesterol levels, and the minerals they contain help to control blood pressure. Soybeans contain a complete set of nonessential and essential amino acids. Not all beans are so healthy, but that can be offset by FACTOR4 Weight Control®.

Fish and shellfish are excellent sources of protein, and some represent rich sources of the important omega-3 fatty acids as well. Fish is low in calories, saturated fat, and cholesterol, so it makes a good substitute for poultry and meat. Eat fish at least twice a week. Omega-3 fatty acids (in fish like salmon,
mackerel, and herring) help lower the triglycerides that are associated with cardiovascular disease. In addition, they may also help prevent cardiac arrhythmias (dangerous heart beat disturbances) and help regulate blood pressure and improve your immune system.

The following table lists healthy sources of protein:

<table>
<thead>
<tr>
<th>Fish, Poultry, Meat &amp; Eggs</th>
<th>Dairy</th>
<th>Legumes</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 oz fish</td>
<td>1 cup of low-fat milk</td>
<td>1 cup of soy milk</td>
</tr>
<tr>
<td>3 oz chicken</td>
<td>1 cup of fat or sugar-free yogurt</td>
<td>½ cup of tofu</td>
</tr>
<tr>
<td>3 oz of turkey</td>
<td>¼ cup, low-fat cottage, feta, ricotta, or cream cheese</td>
<td>½ cup cooked beans</td>
</tr>
<tr>
<td>2-3 oz lean beef</td>
<td>⅔ – 1 oz. whey protein</td>
<td>soy protein</td>
</tr>
<tr>
<td>2-3 oz of lamb</td>
<td>⅔ – 1 oz. casein protein</td>
<td></td>
</tr>
<tr>
<td>2-3 oz of pork</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-3 oz of buffalo</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 egg whites daily</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 egg daily</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Protein-rich foods may add abundant fat calories to diets because protein is often accompanied by fat, so limit the size of your protein portions.

*Choose the right carbohydrates*
Study after study has shown that refined sugars and processed carbohydrates are the enemies of body weight control. They set off a chain reaction of enzymes and hormones that encourage you to pack on excess fat. The first step in the FACTOR4 weight loss program is to curb your intake of refined sugars and processed carbohydrates as much as possible.

These harmful carbohydrates can then be replaced with fruits, vegetables and whole grains. Most fruits and vegetables are low in starch. When eating starch-rich carbohydrates, choose whole grain pastas, breads, and cereals and brown rice and avoid processed grains (such as white bread and white rice) from which the bran and germ have been stripped away. Processing destroys many of their natural vitamins and nutrients and removes most of the fiber. Potatoes are a good example. Potato skins are full of nutrients, including protein and fiber, while the white center consists of high-density starch that is loaded with empty calories.

High-density, starch-loaded carbohydrates add enormous calories even before you pile on the extras, so controlling portion sizes is crucial. This means consuming no more than half-size proportions. The following table lists some of the healthy, high-density carbohydrates and reasonable portions.

<table>
<thead>
<tr>
<th>High-Density Carbohydrates</th>
</tr>
</thead>
<tbody>
<tr>
<td>½ cup dry cereal</td>
</tr>
<tr>
<td>1 slice whole grain bread</td>
</tr>
<tr>
<td>½ cup of cooked bulgur</td>
</tr>
<tr>
<td>½ large baked sweet potato</td>
</tr>
<tr>
<td>½ cup shredded wheat</td>
</tr>
</tbody>
</table>

Here are a few simple guidelines for cutting down on refined and processed carbohydrates:
• Lower your consumption of refined sugars (sucrose or high fructose corn syrup) by 90% or more
• Avoid soft drinks, colas, and energy drinks altogether. They are heavily laden with sugar, HFCS and often caffeine
• Cut out 50% of your processed fruit juices, which contain a lot of added sugar. Replace them with the natural fruit itself
• Say no to sugar-rich foods containing “empty” calories, such as candy, cakes, pies, cookies, ice cream, pastries, and sticky buns. Substitute fresh fruits and berries that are naturally lower in sugar.
• If you must add sugar to your coffee, consider substituting artificial sweeteners or switching to tea and drinking it without any sweeteners
• Cut in half your consumption of bread, potatoes, white rice, flour products, pastas, pizza, and other high-density, starch-rich carbohydrate foods and substitute whole grains for white grains in these foods

Vegetables and fruits

Fresh vegetables and fruits are the healthiest of the dietary staples. They are rich in essential vitamins, phytonutrients, and antioxidants. They are key sources of essential minerals. And they are rich in fiber that may stabilize blood sugar, lower cholesterol levels, and increase regularity in intestinal function. People who eat generous portions of fruits and vegetables show a lower risk for the leading causes of death and health problems. As your mother used to tell you, eat your vegetables and fruits: they are good for you!
Don’t limit your daily servings of brightly-colored fresh and frozen vegetables and fruits. The only exceptions are dried fruits and fruit juices that contain significantly higher levels of sugar than fresh fruit.

The following table lists healthy fruits, vegetables and legumes.

<table>
<thead>
<tr>
<th>Fruits</th>
<th>Vegetables</th>
<th>Legumes¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>½ Banana</td>
<td>Carrots</td>
<td>White and navy beans</td>
</tr>
<tr>
<td>Grapefruit</td>
<td>Green beans</td>
<td>Lima beans</td>
</tr>
<tr>
<td>Grapes</td>
<td>Broccoli</td>
<td>Pinto and black beans</td>
</tr>
<tr>
<td>Strawberries</td>
<td>Cauliflower</td>
<td>Black-eyed peas</td>
</tr>
<tr>
<td>Blueberries</td>
<td>Salad greens</td>
<td>Split peas</td>
</tr>
<tr>
<td>Blackberries</td>
<td>Squash</td>
<td>Brown and red lentils</td>
</tr>
<tr>
<td>Cranberries</td>
<td>Spinach</td>
<td>Chick peas</td>
</tr>
<tr>
<td>Tomatoes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹ Legumes contain considerable amounts of protein. They are also listed with protein and dairy.

One advantage of fruits and vegetables is their low energy density. Large portions contain only a few calories. For example, an average vegetable serving contains only about 25 calories; while an average fruit serving contains only about 60 calories. The Mayo Clinic, one of the country’s leading centers for nutritional research and health, recommends 4 or more vegetable servings and 3 or more fruit servings a day.

**Reduce your intake of fat:**

Fat by itself is not necessarily “bad.” After all, we evolved over millennia on a diet composed of high-protein and high-fat
foods. But certain kinds of fat are worse than others. Fats in processed foods are particularly dangerous because they have been modified, transformed, and hydrogenated into substances like trans fat that your body does not process well. Fats in meat, poultry, and fish may be high in calories, but they are recognized and processed by your metabolism.

When you do use fat, choose liquid vegetable oils instead of saturated animal fats. For example, canola and olive oils are rich in unsaturated fats and preferable to solid oils like butter and margarine. Because “fat follows protein” in many meats, seafood, and dairy products, look for low-fat and lean cuts of these foods. Low-fat dairy products are better than their full-fat counterparts. Avoid fat-rich salad dressings, cooking oils, and butter. All fats are high in calories. They contain 9 calories per gram, which is more than twice the calories contained in protein and carbohydrates. Use all fats, including vegetable oils like olive and canola oil, in moderation.

The following table lists healthy fats and reasonable portion sizes.

Here are a few tips to help you cut down on the bad fats in your diet.

- Buy lean cuts of red meat, such as top and bottom round steak, and remove all the visible fat before you cook them
- Broil, bake, or barbecue. Do not fry anything
- Steam your vegetables and season them with herbs and spices instead of butter and sauces
- Sauté or poach fish, chicken, and similar foods with wine or defatted broth. Use olive oil only sparingly
- Use non-fat milk, 1% fat milk, or soy milk and non-fat or low-fat cheese instead of their full-fat versions
• Use low fat salad dressings at home. In restaurants ask for salad dressings, rich sauces, and butter “on the side,” and don’t use any more than you have to
• Avoid processed foods that are high in saturated and trans fats, including crackers, chips, cookies, cakes, pies, and popcorn
• Avoid palm oil or cocoa butter that are rich in saturated fat
• When you do buy foods that are higher in fat, look for products like vegetable oils, canola oils or soybean oils that are rich in mono- and poly-unsaturated fats.
• Pay particular attention to prepared and commercial foods that are high in both carbohydrates and fat. They may taste great. But when carbohydrates are part of high-fat, high-protein diets with unrestricted calories, the “diet” turns into a sure-fire prescription for rapid weight gain. In fact, excess fat, protein, and carbohydrate combine to create the deadliest diet known to mankind.

**Increase the fiber in your diet**

Dietary fiber is the indigestible carbohydrate in fruits, vegetables, whole grains, and legumes. Most Americans get no more than 15 to 20 grams of fiber in their diet, which is far below the amount men and women need. Fiber is important for several reasons. It improves digestion. It stabilizes sugar and cholesterol levels in the blood. And best of all, fiber can reduce the absorption of calories and help you lose weight.

There are 2 kinds of fiber: soluble and insoluble. Both are important for losing weight. Insoluble fiber is also known as “roughage.” It is found in vegetables and whole grains and
decreases the amount of calories absorbed by the body. Soluble fiber can be found in foods like oats, barley, peas, beans, and citrus fruit. It can help keep your cholesterol down and improve your overall metabolic health.

Consume 20 to 30 grams or more of fiber per day. The following vegetables, legumes, fruits, and whole grains are good sources of fiber.

<table>
<thead>
<tr>
<th>Source</th>
<th>Approx grams</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 small apple</td>
<td>2.8</td>
</tr>
<tr>
<td>1 medium banana</td>
<td>2.0</td>
</tr>
<tr>
<td>½ cup kidney beans</td>
<td>5.5</td>
</tr>
<tr>
<td>½ lima beans</td>
<td>4.4</td>
</tr>
<tr>
<td>1 slice, whole wheat bread</td>
<td>2.0</td>
</tr>
<tr>
<td>¾ cup broccoli</td>
<td>5.0</td>
</tr>
<tr>
<td>4 raw carrot sticks</td>
<td>1.7</td>
</tr>
<tr>
<td>½ cup green beans</td>
<td>2.1</td>
</tr>
<tr>
<td>½ cup canned peas</td>
<td>3.0</td>
</tr>
<tr>
<td>½ cup oat bran</td>
<td>3.0</td>
</tr>
<tr>
<td>1 small orange</td>
<td>3.0</td>
</tr>
<tr>
<td>1 medium peach</td>
<td>2.0</td>
</tr>
<tr>
<td>1 small pear</td>
<td>3.0</td>
</tr>
<tr>
<td>potato skins</td>
<td>4.2</td>
</tr>
<tr>
<td>½ cup brown rice</td>
<td>5.5</td>
</tr>
<tr>
<td>Watermelon (thick slice)</td>
<td>2.8</td>
</tr>
</tbody>
</table>

If necessary purchase crispy rye crackers in your local health food store. These crackers are loaded with healthy fiber that can help you meet your daily requirements.
Increase your water intake with FACTOR4

Government guidelines recommend that we each drink at least 8 glasses of water a day. Commercial drinks, available in grocery stores, may substitute for the fluid ounces of water. However, most if not all commercial drinks, including soft drinks/colas, Gatorade, Vitamin Water, Lemonade, Iced Tea and fruit juices all contain between 20 and 30 grams of sugar. Supersized soft drinks at 64 oz contain 160 grams of sugar. Sugar (sucrose) and high fructose corn syrup (HFCS) both represent quick sources of energy. Many other fluid drink brands are touted as “energy” drinks that contain high levels of caffeine as well as sugar or HFCS. Some of these energy drinks even contain alcohol! The combination of high concentrations of sugar and caffeine, with or without alcohol, are toxic to the human body.

Nutrition experts believe that the current epidemic of obesity could be explained by the consumption of an extra 20-oz soft drink each day. Refined sugars are considered “empty calories” because they provide calories without satisfying appetite and lead, in part, to chronic degenerative diseases that are associated with the Metabolic Syndrome, accelerated aging and early death.

Fortunately, FACTOR4 Weight Control® can energize the body and substitute for fluid ounces of water without including the harmful effects of sugar, caffeine and alcohol. FACTOR4™ contains power amino acids® that stimulate the anabolic processes of youth which lead to supercharged health. In addition, FACTOR4™ stimulates weight control, metabolic health, revitalized youth and anti-aging health. As such FACTOR4™ is the ultimate elixir of life!
General Tips

Keep a positive attitude about your weight loss goals. And remind yourself, whenever necessary, that you will lose the weight you are trying to lose. Here are five tips that will insure your ultimate success:

- Don’t starve yourself. Eat three meals a day. If you are hungry in between meals, drink a FACTOR4 Weight Management shake or smoothie. Eat slowly and savor the flavor of good food and conversation.
- Don’t be impatient. Changing life-long behavior cannot happen overnight. Let it take as long as it takes.
- Don’t let occasional setbacks weaken your commitment. You are in this for the long haul. Expect lapses and know you can overcome them.
- Don’t try to be perfect. Learn from your mistakes. Don’t let “perfect” be the enemy of “good.”
- Don’t give up or give in. Persistence leads to success.

Exercise

Exercise by itself will seldom help you lose weight. But exercise will work with your FACTOR4 Weight Loss program to produce better results faster. Exercise programs have the potential to accelerate weight loss and improve body fitness. Government guidelines currently recommend at least 30 to 60 minutes of physical activity each day to ensure health and fitness.

When you take FACTOR4 Weight Control, you will notice significant increases in your energy levels within a few days. Once you feel energized, your physical activity will increase
spontaneously and you’ll discover a new interest in exercising. As the anabolic effects of FACTOR4 build up your muscle tissue, your exercise program will accelerate your weight-loss success and improve your fitness.

**Aerobic Exercise**

Aerobic exercise does wonders for your heart and your metabolism. A few examples of aerobic exercise are walking, running, jogging, biking, and rowing. But any exercise that calls upon you to use large muscle groups to raise heart rates, breathing rates, and body temperatures is aerobic.

Aerobic exercise has a multitude of benefits: It

- improves your cardio-respiratory and cardio-vascular systems
- decreases your resting heart rate and increases your heart’s pumping efficiency
- improves the circulation in your arms and legs
- stimulates your ability to burn fat after 15 minutes of exercise
- raises your metabolic rate, which also burns fat
- builds up your muscle mass, which helps burn fat
- reduces your stress levels
- improves your sleep and mood
- decreases your blood pressure
- reduces the LDL cholesterol in your blood
- increases the oxygen levels in your blood
- stimulates the anabolic processes that revitalize your youth
- tones your muscles and physique
- improves your balance and flexibility and reduces your injury potential
- improves your posture

You can start as simply as taking a brisk, 1- to 3-mile walk. Each mile should take about 20 minutes. If necessary, start with 1 mile and work up to longer distances. Once you are comfortable with walking, you can burn a few more calories by carrying weights in your hand while you walk. Or you can bike 3 to 5 miles (30 to 40 minutes) a day. Look for hills to burn more calories. This is also a great exercise for your heart.

The frequency, intensity, and duration of your aerobic exercise will determine your fitness level. During your aerobic exercise, the American College of Sports Medicine recommends you set a goal of increasing your heart rate by 50% to 85%.

Schedule each session to last from 30 to 60 minutes, 3 to 5 days a week. During the first 15 minutes, you’ll be burning off sugars and glycogen. Fat metabolism starts after about 15-20 minutes. Only then will you begin to see serious fat losses.

**Weight Training**

Weight training develops your muscle strength and makes your body leaner with increased muscle tone. Then, as your muscles grow stronger, you’ll increase your metabolism and burn more fat, and your success will build momentum. Strength training increases your bone density as well as the strength of tendons and ligaments, which decreases your risk of injury. It improves your posture and helps prevent your muscles from atrophying as you get older. And strength training can improve your blood pressure, too!
You can do all this at home without spending a lot of money. Purchase some light-weight dumbbells from a local sporting goods store. Buy them in pairs, one for each hand. Most women can start with 2½-pound weights and work up to 5 pounds. Men can start with 5-pound weights and work up to 7½ pounds.

A beginning home routine might include:

- 5 minutes of stretching
- Push-ups (chest muscles and triceps)
- One arm rows (back and biceps)
- Arm curls (biceps)
- Triceps extensions (triceps)
- Shoulder press (traps and front delts)
- Side lateral raises (side deltoid and shoulder)
- Front lateral raises (rear deltoid and shoulder)
- Squats (quads, hamstrings/upper leg and gluteus)
- Lunges (quads, hamstrings/upper leg and gluteus)
- Calf raises (calf/lower legs)

Start with one set of 12–15 repetitions and increase the number of repetitions as your fitness and endurance increase.

If you prefer to work out at the gym, you’ll be able to put together a much more sophisticated workout. If you are really serious, make an appointment with a certified trainer who can help you put together an exercise program for your specific needs. You can also take advantage of the personal training services that most gyms offer.

A typical gym routine might look something like this:
• Warm up for 5 minutes on a bike, treadmill, stair-climb, or other cardio machine
• Leg press machine (total lower body)
• Chest press machine (chest)
• Cable pulldown—wide grip (back)
• Leg extension machine (quadriceps)
• Bicep machine (arms)
• Cable pushdowns (triceps)
• Leg curl machine (hamstrings)
• Overhead shoulder press machine (shoulders)
• Row machine (back)
• Calf raises—standing or sitting (lower legs)
• Fly machine (Chest)
• Lower back machine (lower back)

Start with a set of 12–15 repetitions and increase the number of repetitions slowly as your fitness and endurance improve.

Whether you work out at home or in the gym, vary your weekly exercise routines. For example, alternate 3 days of aerobic exercises with 2 or 3 days of small weight training. This allows your body to rest and recover from one exercise while you are exercising different muscle groups. Giving your body a recovery period reduces your risk of fatigue and injury. If any exercise causes pain other than that you would expect from muscle use, stop the exercise and consult with a physician.
APPENDIX I

**FACTOR4 is Superior and Complementary to All Other Weight-Loss Strategies**

Add FACTOR4 Weight Control® to Any Diet Plan to Improve results and Ensure Success

Although diets to stimulate weight loss have been popular for centuries, they are less effective than generally believed for two main reasons:

- Popular diets drain the body of essential nutrients.
- Popular diets break down muscle tissue and body health through catabolic (destructive) reactions.

Here are the top ten reasons why FACTOR4 Weight Control® can ensure that you reach your weight loss goals while maintaining optimal body health:

- FACTOR4 Weight Control® is complementary to other diet plans because it rebuilds the body with Power Amino Acids®, the essential ingredients for supercharged protein health
- FACTOR4™ corrects “protein deficiency syndrome” which leads to overweight disorders and obesity in the first place
- FACTOR4™ suppresses appetite, blocking food cravings, hunger pangs, famished states, and eating binges
• FACTOR4™ inhibits the desire for refined sugars and starch-rich foods that increase appetite and provide “empty calories” to the body
• FACTOR4™ improves metabolic health in the 8 major health systems of the body
• FACTOR4™ revitalizes youth with pep, energy, activity, stamina, endurance, and performance
• FACTOR4™ improves aging health with increased “quality of life,” including comfort, satisfaction, and well-being
• FACTOR4™ provides supercharged protein health, converting the catabolic reactions of aging to the anabolic processes of youth
• FACTOR4™ resets metabolic pathways from fat storage to fat burning metabolism
• FACTOR4™ uses nature’s way to rebalance the caloric equation and achieve weight loss health

Add FACTOR4 Weight Control® to Any Weight-Loss Meal Program to Improve Results and Ensure Success

Weight loss meal programs have proved to be of some benefit for people suffering from overweight disorders and obesity. By providing meals designed by professional nutritionists, excess calories may be removed from the diet. In addition meal programs are optimal for senior citizens who are unable to perform grocery shopping and meal preparation efforts that result in healthy eating habits.

However, meal programs may be insufficient to rid the body of excess unwanted fat without causing nutritional deficiencies. In this case a highly nutritious product that primes the body
for weight loss may tip the balance and ensure that you meet your weight loss goals while maintaining optimal nutrition and health. FACTOR4 Weight Control® was formulated with these goals in mind.

Here are the top ten reasons why FACTOR4 Weight Control® can complement your weight loss meal program and ensure that you reach your weight loss goals:

- FACTOR4 Weight Control® is complementary to weight loss meal programs because it provides Power Amino Acids®, the essential ingredients for priming the body for efficient weight loss
- FACTOR4™ corrects “protein deficiency syndrome” which leads to overweight disorders and obesity in the first place
- FACTOR4™ suppresses appetite abolishing food cravings, hunger pangs, famished states, and eating binges
- FACTOR4™ inhibits the desire for refined sugars and starch-rich foods that increase appetite and provide “empty calories” to the body
- FACTOR4™ improves metabolic health in the 8 major health systems of the body
- FACTOR4™ revitalizes youth with pep, energy, activity, stamina, endurance, and performance
- FACTOR4™ improves aging health with increased longevity and improved “quality of life,” through feelings of comfort, satisfaction, and well-being
- FACTOR4™ provides supercharged protein health, converting the catabolic reactions associated with aging to the anabolic processes associated with youth
• FACTOR4™ resets metabolic pathways from fat storage to fat burning metabolism
• FACTOR4™ uses nature’s way to rebalance the caloric equation and achieve weight loss health

Add FACTOR4 Weight Control® to Any Weight-Loss Product to Improve Results and Ensure Success

Weight loss products fall into several distinct groups according to mechanisms of weight loss:

• Metabolic enhancers (Phentermine©, Caffeine, Guarana, Theophylline, Ephedrine)
• Appetite suppressants (Cocaine, Methamphetamine, Sudafed)
• Fiber supplements that inhibit the digestive process and therefore reduce the number of calories that are absorbed by the body (Cal-Trap)
• Fiber supplements that expand in the stomach to create a feeling of fullness

However, pharmaceutical agents (Phentermine©) and nutraceutical agents (Caffeine, Guarana, and Theophylline) lead to the “jitters.” Appetite suppressants such as cocaine and methamphetamine are illegal as is Ephedrine (Ma Huang). Fiber supplements decrease the digestive process in the intestinal tract. The great majority of weight loss products drain the body of essential nutrients, and both metabolic enhancers and illegal substances may cause bodily harm and accelerated aging. In addition the FDA has recently clamped down on many weight
loss capsules and tablets that are tainted with dangerous illegal drugs.

FACTOR4 Weight Control® was formulated as a weight loss product that improves body health and resets metabolic pathways to convert fat storage processes to fat burning processes. Because FACTOR4 Weight Control® rebuilds the body with Power Amino Acids® and optimizes metabolic pathways, it may be used to great benefit in conjunction with other weight loss products. FACTOR4 Weight Control® may also be used to replace other weight loss products.

Here are the top ten reasons why FACTOR4 Weight Control® can complement and synergize popular weight loss products to ensure that you reach your weight-loss goals and maintain optimal body health:

- FACTOR4 Weight Control® is complementary to other weight loss products because it rebuilds the body with Power Amino Acids®, the essential ingredients to prime the body for weight loss health
- FACTOR4™ corrects “protein deficiency syndrome,” an imbalance between positive-charged and negative-charged proteins, which leads to overweight disorders and obesity in the first place
- FACTOR4™ suppresses appetite blocking food cravings, hunger pangs, famished states, and eating binges that accompany the use of other weight-loss products
- FACTOR4™ inhibits the desire for refined sugars and starch-rich foods that increase appetite and provide “empty calories” to the body
• FACTOR4™ improves metabolic health in the 8 major health systems of the body
• FACTOR4™ revitalizes youth and boosts metabolism by increasing pep, energy, activity, stamina, endurance, and performance
• FACTOR4™ improves “quality of life,” with feelings of comfort, satisfaction and well-being
• FACTOR4™ provides supercharged health, converting the catabolic reactions of aging to the anabolic processes of youth
• FACTOR4™ resets metabolic pathways from fat storage to fat burning metabolism
• FACTOR4™ uses nature’s way to rebalance the caloric equation and achieve weight loss health

Add FACTOR4 Weight Control® to Any Vegetarian Diet to Improve Health

Within America there is a growing popularity of vegetarian diets. Vegetarian diets can be healthy and control unwanted weight gains. Vegetarian diets also avoid animal-based foods that rely on sacrifice of living animals.

However, vegetarian diets may also be deficient in protein if the individual does not consume dairy products. Vegetables, fruits and legumes help provide protein, but these are insufficient by themselves to supply the daily minimum requirement for protein in the diet. With marginal levels of protein in the diet, many vegetarians develop an “unhealthy appearance” in their skin, hair and nails within the first five years on a strict vegetarian diet.
Although their body remains slender, it may suffer from protein deficiency syndrome, a newly discovered disorder that results from a deficiency of essential and positive-charged amino acids and proteins. Protein deficiency syndrome normally results in an imbalance in metabolic pathways that can lead to poor nutritional health in organs and tissues throughout the body. For example, some vegetarians show harmful decreases in the thickness of heart muscle that may impair circulation of essential nutrients through the body. Many other harmful effects may occur in the 8 major health systems in the body.

Fortunately, FACTOR4 Weight Control® rebuilds the body with power amino acids that correct protein deficiency syndrome and re-balance metabolic pathways. FACTOR4 stimulates anabolic (constructive) health and prevents catabolic (destructive) health.

In summary, Factor Weight Control® supplementation is ideal for individuals who are committed to vegetarian diets but seek to ensure that they remain in optimal health with regard to body weight, metabolic health, revitalized youth, and anti-aging health as well.

Here are the top ten reasons why FACTOR4 Weight Control® will ensure optimal protein health in individuals who adhere to vegetarian diets:

- FACTOR4 Weight Control® is ideal for individuals who are committed to vegetarian diets because it rebuilds the body with Power Amino Acids®, the essential ingredients for protein health throughout the body
- FACTOR4™ corrects “protein deficiency syndrome,” an imbalance between positive-charged and negative-
charged proteins, which leads to poor metabolic health in the first place
• FACTOR4™ suppresses appetite and blocks food cravings, hunger pangs, famished states, and eating binges that may accompany diets that are deficient in protein
• FACTOR4™ inhibits the desire for refined sugars and starch-rich foods that increase appetite and provide “empty calories” to the body
• FACTOR4™ improves metabolic health in the 8 major health systems of the body
• FACTOR4™ revitalizes youth and boosts metabolism by increasing pep, energy, activity, stamina, endurance, and performance
• FACTOR4™ improves “quality of life,” with feelings of comfort, satisfaction and well-being
• FACTOR4™ provides supercharged health, converting the catabolic reactions of aging to the anabolic processes of youth
• FACTOR4™ resets metabolic pathways from fat storage to fat burning metabolism
• FACTOR4™ uses nature’s way to rebalance the caloric equation and achieve weight loss health
As described in this book, power Amino Acids® show numerous positive benefits on weight loss health, metabolic health, revitalized youth, and anti-aging health. It is instructive in this regard to compare the efficacy of vitamins, antioxidants, and power amino acids in these four important areas of health and to understand which of these supplements provides the greatest benefit in today’s market.

**Vitamins and Antioxidants**

Ever since Nobel Prize winning biochemist Linus Pauling promoted megadoses of vitamin C 40 years ago, Americans have been hooked on vitamins. Today about a half of all adults use some form of dietary supplement, usually vitamin supplementation, at a cost of $23 billion a year.

But the question is: *Do these vitamins and/or antioxidants have a positive effect on America’s health?*

Over the past 30 years, the National Institutes of Health has spent hundreds of millions of dollars in attempts to demonstrate that vitamins and/or anti-oxidants reduce the incidence of disease. These studies have been inspired by the finding that people who
eat lots of nutrient-rich fruits and vegetables have long been known
to have lower rates of heart disease and cancer.

**Negative Results on Vitamins and Antioxidants**

While early results showed suggestive effects, the final results indicated no beneficial effects whatsoever.

- In February, 2009, the Women’s Health Initiative reported on 161,000 older women who received multivitamin supplementation over 8 years. This study found no improvement in health benefits from multivitamins.
- A study published in 2008 tracked 15,000 physicians for a decade and found no difference in cancer or heart disease rates among those using vitamins E and C compared with those taking a placebo.
- In October, 2008, a study of 35,000 men dashed hopes that high doses of vitamin E and selenium could lower the risk of prostate cancer.

**Other Studies Show Harmful Effects**

- In 2007 mortality rates in randomized trials of antioxidant users was assessed in 47 trials of 181,000 participants. The results showed a 5% higher mortality rate among antioxidant users. The main culprits were vitamin A, beta carotene, and vitamin E. Vitamin C and selenium seemed to have no meaningful effects.
- In a recent animal study at the University of North Carolina, mice with brain cancer were given both normal and vitamin-depleted diets. The ones who were deprived of antioxidant vitamins had smaller tumors, and 20% of
the tumor cells were undergoing cell death by apoptosis, which is fueled by free radicals. In the fully nourished mice, only 3% of tumor cells were dying.

- High lung cancer rates were found in two studies of beta carotene use.
- One study suggested that folic acid use led to higher risk of precancerous colon polyps.

**Conclusions**

- The benefit of high doses of vitamins and nutrients is not supported by scientific data
- Most scientists suspect that the benefits of a healthful diet come from eating the whole fruit or vegetable, not just the individual vitamins found in it

**Comment**

Yes, vitamins are essential nutrients that the body cannot produce on its own. However, a balanced diet typically provides an adequate level of these nutrients, and today many popular foods are fortified with extra vitamins and minerals as well.

**Evidence on Power Amino Acids®**

In contrast to the lack of evidence that vitamins and antioxidants have any health benefits to Americans, Power Amino Acids® contained in FACTOR4 Weight Control® show numerous positive benefits on body health. The evidence shown below more than demonstrates that power amino acids® are the safest and most effective dietary supplement on the market today.
Positive Benefits of Power Amino Acids® on Core Body Health

Power amino acids® help to establish the four cornerstones of health in the FACTOR4 Wellness Program. These cornerstones are:

- **Weight Loss Health**, providing you with a healthy body physique that will ensure success
- **Metabolic Health**, allowing you to avoid many of the chronic degenerative diseases that afflict mankind
- **Revitalized Youth**, restoring levels of pep and energy that decrease your functional age
- **Anti-Aging Health**, providing you with feelings of comfort, satisfaction and well-being that presage longevity with improved quality of life

Four Major Benefits in Weight Loss Health

Here are the top four reasons why Power Amino Acids® confer unique benefits on metabolism and body weight:

- Power Amino Acids® **burn calories**, by resetting metabolic pathways that control fat storage and fat metabolism.
- Power Amino Acids® **suppress appetite** by satisfying appetite centers in the brain and stomach
- Power Amino Acids® **satisfy cravings** with feeling of comfort, satisfaction, and well-being
- Power Amino Acids® **boost energy** by increasing muscle mass and anabolic health

Top 20 General Health Benefits of FACTOR4 Weight Control®

Here are the top 20 general health benefits of Power Amino Acids®, which:
• Rebuild the body with essential amino acids that improve metabolic health in the body and provide amino acid precursors that rebalance neurotransmitter levels in the brain
• Close the food-chain gap, which corrects deficiencies in amino acids, positive-charge proteins, and metabolic pathways that preserve core body health
• Correct protein deficiency syndrome, which leads to overweight disorders and obesity in the first place
• Reset metabolic pathways from fat storage to fat burning metabolism
• Use nature’s way to rebalance the caloric equation and achieve weight loss health
• Suppress appetite through natural mechanisms, thus blocking food cravings, hunger pangs, famished states, and eating binges
• Inhibit the desire for refined sugars and starch-rich foods that increase appetite and provide “empty calories” to the body
• Revitalize youth with pep, energy, activity, stamina, endurance, and performance
• Tone the body by increasing muscle tissue and decreasing body fat.
• Improve anti-aging health with increased longevity and improved “quality of life,” with feelings of comfort, satisfaction, and well-being
• Provide supercharged protein health converting the catabolic reactions of aging to the anabolic processes of youth
- Increase clarity of thought and sharpen memory
- Relieve mood swings, anger, rage, and aggression
- Relieve stress, anxiety reactions, and panic attacks
- Relieve depression, loss of self-esteem, and suicidal tendencies
- Relax the muscles in the body and enhance restful sleep
- Help to relieve drug, alcohol, and nicotine dependency
- Combat the risk factors associated with the Metabolic Syndrome, including high blood levels of cholesterol, triglycerides, and sugar
- Combat the chronic degenerative diseases associated with the Metabolic Syndrome, including overweight disorders, type 2 diabetes, cardiovascular disease, certain type of cancer (breast, prostate, endometrial, and colon), osteoarthritis, and gall bladder disease
- Improve metabolic health in the 8 major health systems of the body

**Feel Better in the Eight Major Health Systems in the Body**

Here are the 50 ways you may feel better in the eight (8) major health systems in the body:

<table>
<thead>
<tr>
<th>Health System</th>
<th>Effects of the FACTOR4 Weight Control with Power Amino Acids and Health-Plus Proteins</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body weight and energy health</td>
<td>Fat loss in extremities(^2,3)</td>
</tr>
<tr>
<td></td>
<td>Fat loss in central torso(^2,3)</td>
</tr>
<tr>
<td>Body weight and energy health (continued)</td>
<td>Decrease in total body weight(^2,3)</td>
</tr>
<tr>
<td></td>
<td>Increase in pep &amp; energy(^2,3)</td>
</tr>
<tr>
<td></td>
<td>Metabolic balance(^2)</td>
</tr>
<tr>
<td><strong>Power Amino Acids: The Factor 4 Advantage in Metabolic Health</strong></td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
<td></td>
</tr>
</tbody>
</table>
| **Increase in lean muscle mass**
| **Muscle strength enhanced**
| **Muscle relaxation increased** |
| **Beauty health** |
| **Skin color, texture, and health increased**
| **Hair becomes smoother, thicker, and healthier**
| **Nails increase in color, strength, and radiance** |
| **Mental balance/health** |
| **Clarity of thought increased**
| **Memory improved**
| **Mood stabilized**
| **Stress reduced**
| **Depression relieved**
| **Sleep enhanced**
| **Addictions decreased**
| **Sensory health increased (peripheral vision, hearing, taste, smell, touch)** |
| **Digestive health** |
| **Taste adapts to high-value foods**
| **Appetite satisfied**
| **Shrink the stomach and intestinal tract**
| **Calming effect on stomach**
| **Decrease in acid reflux & heartburn**
| **Increased regularity of bowel movements** |
| **Metabolic and cardiovascular health** |
| **Type II Diabetes reduced with weight loss** |
| **Metabolic and cardiovascular health (continued)** |
| **Systolic and diastolic blood pressure reduced**
| **Total and LDL cholesterol levels reduced** |
| **Immune health** | Decrease in glycemic index (high blood sugar)¹
| | Metabolic Syndrome prevented & treated¹,²,³
| | Body wasting disorders corrected²,³
| **Immune health** | Increased resistance to viruses²
| | Increased resistance to bacteria²
| | Increased resistance to fungi²
| | Decreased free radicals⁴
| | Decreased non-specific inflammation⁴
| | Decreased C-reactive protein¹
| **Reproductive health** | Sexual desire increased²
| | Erectile function increased²
| | Sexual activity increased²
| | Ejaculate volume increased²
| | Ovarian health increased⁴
| **Aging health** | Decrease in tired, weak feelings²
| | Anabolic (beneficial) effects on organ functions, including heart, lung, liver, kidneys, etc.³,⁴
| | Decrease in functional age²
| | Disease prevention during aging²,³
| | Aging performance increased²
| | Increase in longevity⁴

¹ Demonstrated in published clinical trials on Whey protein
² Demonstrated in testimonials
³ Predicted with supporting evidence in literature
⁴ Predicted
Final Conclusions

Despite the enormous amounts of money that have been spent on multivitamins, individual vitamins, and antioxidants over the past 40 years and the enormous amounts of money that have been spent in efforts to demonstrate the health benefits of these supplements, the scientific results of extensive, well-designed studies indicate there are no measurable benefits to these products.

Power amino acids® represent a relatively new concept in dietary supplementation. Their delivery is best achieved through FACTOR4 shakes rather than capsules. Power amino acids® confer enormous benefits to health throughout the entire body. These benefits are not only revealed by objective standards but also perceived through the feelings of improved health that are quickly noticed by individuals that take this supplement. For these compelling reasons, POWER AMINO ACIDS® now standout as the #1 dietary supplement that all people over 30 years of age should take to maintain GOOD HEALTH as the #1 priority in life.
APPENDIX III

FACTOR4 Recipes

FACTOR4 Weight Control® is easy to use. It tastes great, too! When shaken in a bottle blender or shaker cup it dissolves rapidly in liquid, and its vanilla-praline flavor blends with many different foods. You can use it in power shakes and smoothies or sprinkle it directly onto fruits. You can add it to coffee or tea and economize on the cost of expensive lattes from coffee bars. The flavor can easily be changed by adding berries or sugar-free chocolate syrup. If you want it sweeter, add a little Splenda®, stevia, or other non-calorie sweetener.

The recipes that follow are just a few of the delicious ways you can enjoy FACTOR4 Weight Control®. Follow your imagination. You may find that FACTOR4 is your favorite part of the meal!

**Power Shakes**

*Basic shake*
- 2 scoops, FACTOR4 Weight Control®
- 8 oz. water
- ice cubes

Add 2 scoops of FACTOR4 to water and ice cubes in a blender bottle or mason jar. Shake well. Total calories: 70, with 10 grams of protein, less than 1 gram of fat, and only 1.2 grams of carbohydrate.
“Egg creme” shake
- 2 scoops, FACTOR4 Weight Control®
- 8 oz. club soda
- ice cubes

Add 2 scoops of FACTOR4 to club soda and ice cubes in a blender bottle or mason jar. Shake well. Enjoy a low-calorie FACTOR4 egg cream without the egg or the cream.

Chocolate shake
- 2 scoops, FACTOR4 Weight Control®
- 8 oz. water
- sugar-free chocolate syrup
- ice cubes

Add all ingredients in a blender bottle or mason jar and shake well for a low-calorie chocolate shake.

Soy milk shake
- 2 scoops, FACTOR4 Weight Control®
- 8 oz. low-fat soy milk
- ice cubes

Combine all ingredients in a blender bottle or mason jar. Shake well and enjoy a thick, satisfying milk shake with extra protein and a few extra grams of unsaturated fat and carbohydrate. For variety, alternate plain soy milk with some of the many flavored soy milks.
Smoothies

FACTOR4 Weight Control® goes well with fruits. It combines with the natural sweetness and flavor of fruit to make smoothies that are both healthy and low in calories.

**Berry-banana smoothie**
- 2 scoops, FACTOR4 Weight Control®
- ½ frozen banana
- 8 strawberries
- 4 oz water
- 2 cubes, crushed ice

Combine all ingredients in a blender and process until smooth. Experiment with other berries, such as blackberries and boysenberries.

**Blueberry smoothie**
- 2 scoops, FACTOR4 Weight Control®
- 1 cup, vanilla or plain soy milk
- ½ cup, blueberries
- crushed ice

Combine and blend well in an electric blender. Try other berries as well. FACTOR4 Weight Control® tastes great with all berries!

**Orange “Julius”**
- 2 scoops, FACTOR4 Weight Control®
- 6 oz. orange juice (fresh or from concentrate)
• crushed ice

Combine all ingredients and blend well. This will remind you of a liquid orange creme popsicle!

_Peanut butter smoothie_

• 2 scoops, FACTOR4 Weight Control®
• 8 oz. water
• 1 tsp., natural peanut butter
• ice cubes

Blend well, making sure the peanut butter completely dissolves. Try it with chocolate soy milk or low-fat chocolate milk instead of water!

_Apple pie smoothie_

• 2 scoops, FACTOR4 Weight Control®
• 1 small apple, peeled and cored
• ½ cup, water
• 2 ice cubes
• cinnamon and sweetener to taste

Combine all ingredients and blend well. Use low-fat vanilla or plain soy milk instead of water to give it an a la mode touch!
Breakfast and Dessert

**FACTOR4 oatmeal**
- 2 scoops, FACTOR4 Weight Control®
- ½ cup, uncooked oatmeal
- ½ cup, blackberries
- ½ cup, soy milk, low-fat milk or water

Cook oatmeal, then stir in the FACTOR4. Top with berries and soy milk.

**FACTOR4 cream of wheat**
- 2 scoops, FACTOR4 Weight Control®
- 1 cup, cooked cream of wheat
- ½ cup, strawberries

Stir FACTOR4 into the cooked cream of wheat. Top with strawberries or other berries. Add soy milk or low-fat milk if you wish.

**FACTOR4 shredded wheat**
- 2 scoops, FACTOR4 Weight Control®
- 1 cup, shredded wheat
- ¼ cup, raspberries
- ½ cup, soy milk or low-fat milk

Sprinkle FACTOR4 on top of shredded wheat. Top with raspberries and soy or low-fat milk.
FACTOR4 protein pudding
- 2 scoops, FACTOR4 Weight Control®
- 1 package, sugar- and fat-free vanilla or chocolate pudding mix
- 3 cups, soy milk, low-fat milk or water

Follow the directions on the pudding mix, adding the FACTOR4 and using soy milk in place of regular milk. Makes 6 servings.

FACTOR4 and fruit
- 2 scoops, FACTOR4 Weight Control®
- 4–6 oz., water
- 1 ice cube
- 1 cup, fresh fruit

Mix FACTOR4 and water and pour over the fruit. Experiment with different fruit and berries. Mix FACTOR4 with soy milk for a thicker, creamier topping.

FACTOR4 and yogurt
- 2 scoops, FACTOR4 Weight Control®
- 1 container, light yogurt

Stir FACTOR4 into yogurt and enjoy!
FACTOR4 Meal Replacements

You can use FACTOR4 shakes as meal replacements. Don’t replace more than 2 meals a day without your doctor’s recommendation.

Option 1: light meal replacement (120 calories)
- 2 scoops, FACTOR4 Weight Control®
- 8 oz., cold soy milk
- 2 ice cubes

Option 2: regular meal replacement (220 calories)
- 2 scoops, FACTOR4 Weight Control®
- 12 oz., cold soy milk
- 4 oz., water
- 2 ice cubes

Option 3: Double power meal replacement (240 calories)
- 4 scoops, FACTOR4 Weight Control®
- 8 oz., cold soy milk
- 8 oz., water
- 2 ice cubes
Hot Drinks

Hot tea with FACTOR4 “power cream”
- 2 scoops, FACTOR4 Weight Control®
- tea leaves or tea bags of your choice

Add FACTOR4 weight control to water and shake thoroughly. Store in refrigerator for up to 8 hours. Add FACTOR4 “cream” to tea. Stir and enjoy!

Coffee latte
- 2 scoops, FACTOR4 Weight Control®
- Regular or decaffeinated coffee

Add FACTOR4 to water and shake thoroughly. Store in refrigerator for up to 8 hours. Add FACTOR4 to hot coffee that has been allowed to cool on the counter for a minute. Stir and enjoy!

Iced FACTOR4 Lattes

Iced FACTOR4 coffee latte
- 2 scoops, FACTOR4 Weight Control®
- 1 cup, cooled black coffee
- crushed ice
- Splenda or stevia to taste

In a large blender bottle or mason jar, add ice and FACTOR4, and pour coffee on top. Mix well. Try adding
ground cinnamon, cardamom, or other flavoring for variety.

\textit{Iced Viennese FACTOR4 café}
\begin{itemize}
  \item 2 scoops, FACTOR4 Weight Control®
  \item 6–8 oz. water or low-fat soy milk
  \item \(\frac{1}{2}\) cup, cooled black coffee
  \item 1–2 ice cubes
\end{itemize}

Prepare a shake from the FACTOR4 and water or soy milk. Add coffee to taste and the ice cubes. Tastes like a Viennese iced café without the sugar, ice cream, or whipped cream!

\textit{Iced FACTOR4 Chai tea latte}
\begin{itemize}
  \item 2 scoops, FACTOR4 Weight Control®
  \item 1 cup, crushed ice
  \item Chai tea
\end{itemize}

Brew the Chai tea and let it cool. In blender bottle or mason jar, add the ice and FACTOR4. Top with 1 cup of the tea. Mix well and enjoy. Try other teas as well!
MORE INFORMATION

WWW.FACTOR4HEALTH.COM
More information about power amino acids® and the FACTOR4 weight loss study

WWW.IMPROVEWORLDHEALTH.ORG
More information about the mission of a non-profit organization to improve world health with power amino acids®

WWW.DRGEORGESCHEELE.COM
More information about the author including the author’s past achievements

BLOGGING SITES

Blog.factor4health.com

FACTOR4 WELLNESS PROGRAM

The FACTOR4 Wellness Program sends out weekly information on essential health care to its members. The program includes four weekly themes that rotate on a monthly basis: These themes are Healthy Lifestyles; Weight Control; Metabolic Health; and Anti-Aging.

To become a free member of the FACTOR4 Wellness Program, register at www.factor4health.com
MEET DR. SCHEELE,
CREATOR OF FACTOR4 WEIGHT CONTROL®

Dr. George A. Scheele, world lecturer, physician and founder of NovaLife, Inc., in La Jolla, California, has recently introduced \textit{FACTOR4 Weight Control®}, a delicious nutritional shake, for treatment of the four nutritional traps in overweight conditions and obesity: \textit{the Taste Trap}, \textit{the Vanity Trap}, \textit{the Food Swing Trap}, and \textit{the Sedentary Trap}.

\textit{FACTOR4 Weight Control®} provides all the nutrients that your body needs, including vitamins, minerals, micronutrients, health-plus proteins™ and power amino acids®, to (i) restore nutritional health, (ii) control appetite and (iii) burn fat.

\textit{Power Amino Acids®} and \textit{Health-Plus Proteins™} contained in \textit{FACTOR4 Weight Control®} are critically important in today’s sedentary society to provide the essential nutrients (essential amino acids) that are needed for nutritional health, mental health and weight control. These power supplements will enhance your feelings of “wellness” in up to 50 different ways in the eight (8) major health systems of the body.

Schooled in the Ivy League and trained in Medicine at Johns Hopkins and the University of California at San Francisco, Dr. Scheele served as Professors of Medicine at The Rockefeller University, Yale University School of Medicine and Harvard
Medical School. A pioneer in the development of the fields of Cell and Molecular Biology and their impact on understanding chronic human diseases, he participated in work that won two Nobel Prizes in Medicine awarded in 1974 and 1999.

In a series of celebrated papers published between 1975 and 1995, Dr. Scheele and his collaborators invented new techniques that ultimately “cracked the code” in understanding the “molecular secrets” for how Power Amino Acids® and Health-Plus Proteins™ treat amino acid and protein deficiency disorders associated with overweight conditions and obesity.

As a leader in nutritional science and a pioneer in medical research, Dr. Scheele’s passion has always been to “Make the World a Better Place”. After moving to La Jolla in 1998, he founded NovaLife, Inc. and utilized his vast experience to develop superior health-care products for individuals living in today’s fast-paced world. His recent book, entitled Power Amino Acids and Weight Loss Success: A Breakthrough in Weight Control, Metabolic Health and Revitalized Youth, explains the link between protein health and normal body weight.