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The information in this manual is intended only for healthy men and women. People with health problems should not follow the suggestions without a physician's approval. Before beginning any exercise or dietary program, always consult with your doctor.

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Train like a Champion to Become a Champion? No Way!

Stuart McRobert

“Train like a champ to become a champ” has long been the message promoted by the training world, especially bodybuilding. This message has been trumpeted by almost all the magazines and books in the field – both mainstream and “sidestream” – and by most trainers and gyms too. The motive is simple: It attracts great interest and sells magazines, books, courses, food supplements and gym equipment. While it’s been a huge commercial success in many respects, it’s been a disaster for the training masses.

Imitating the training of the “champion” bodybuilders and lifters is one of the most costly frauds in the exercise world. Despite millions of trainees having failed to meet their exercise goals, despite putting into practice the methods used and promoted by the “champions,” the fraud continues. The failure of the training masses to achieve their goals is NOT publicized by the mainstream. The successes of a tiny minority – the “champions” – dominate the mainstream press and hide the real state of affairs in the training “trenches.”

I used to be a fan of world famous bodybuilder, who I’ll refer to as Mr. X. He was a hero of mine until I found out about the immense harm for which he was responsible. I was just one of the millions who, over the years, have been grossly misled by Mr. X and his ilk. The following is a statement of what Mr. X was really responsible for, and what bodybuilding orthodoxy prefers to keep hidden, in the hope that by keeping it suppressed people will actually believe that competitive bodybuilding is healthy, drug-free and full of decent and honest guys. This is necessary in order to keep the “train like a champ to become a champ” mentality alive and well.

I started weight training in 1973, age 15, when Mr. X was in his prime as a competitive bodybuilder. I know from first-hand the impact Mr. X has on ignorant and gullible neophytes. His training methods were promoted to the training world with no caveats. This was done via many magazines from different publishers, and several books. The format was basically, “Here’s how Mr. X did it, and if it was good enough for him it’s certainly good enough for you. Train, eat and take food supplements like Mr. X did, to be like Mr. X! Train like THE champion to become a champion yourself!”

When I started out in bodybuilding I was consumed with dreams of building a great physique. I wanted to be as good as Mr. X. I trained with the same dedication. I trained as his articles said I should. And I didn’t neglect the mental aspects – I imagined my biceps as mountains, like Mr. X did, and I had a positive mental attitude. I took on jobs to earn money to buy the extra food and food supplements I had to have. I was as dedicated as possible. Everything in my life played second fiddle to bodybuilding. I became a recluse. I was antisocial. All I wanted to do was train and then apply myself to fully satisfying my recovery needs, which meant getting lots sleep and avoiding social activities.

Fitness Fraud

Because I had the extreme level of dedication supposedly needed to become a champion, and because I knew I was delivering on the dedication front, was training harder than anyone else at the gym, and I ate a lot and slept plenty – going to bed earlier than all my peers – I couldn't understand why I wasn't making good progress. In fact, I wasn't making any progress for a long while. It was only years later that I realized the reasons why – I didn't have the great genetics Mr. X had, and I wasn't "supplementing" with drugs. I actually believed that the only supplements Mr. X took were of the food type.

I didn't build a physique like Mr. X's. Not only that, but I didn't even get close. In fact, the methods he followed and advocated SET ME BACK. When I got to know of the drug component, I was fortunately disciplined enough never to use bodybuilding drugs. Had I not had this discipline, however, I'd probably either be dead by now, or a physical wreck. Not having the genetics to be able to build huge muscles naturally almost certainly meant that I'd never have had the extraordinary physical robustness needed to withstand heavy drug use.

I wish someone had grabbed that young, gullible, ignorant and oh-so-enthusiastic bodybuilder I was, and demanded that I trained in a way that was appropriate for me. Then I'd have made more gains over just one year than I did from many years of the conventional approach of four or more days of training each week, multiple exercises per body part and many sets. I was robbed of the best training years of my life through deception and irresponsible instruction. Train like Mr. X did, or ANYONE of his ilk, and you'll never develop a terrific physique unless you're one of the very few who have phenomenal genetic potential. It's not necessary that you too waste years of your life before you learn this lesson. Learn it now!

The "instruction" found in most articles from/by elite bodybuilders has no practical relevance for typical people. This comment is not directed specifically at any one magazine, book or individual. All the mainstream bodybuilding magazines throughout the world have, to varying degrees, promoted the "train like a champ to become a champ" maxim. For an illustration, consider a 1998 article on Mr. X's chest training in a major newsstand bodybuilding magazine. A five-exercise 24-set chest routine twice a week is training suicide for the typical drug-free trainee. That's how it is. This is not sour grapes, or mean spirited. There were no caveats accompanying the article pointing out the need for superior genetics and drug assistance to make the routine work. What relevance has that article got for the average trainee? But the typical youngster is going to copy it, just like I did when I was young, and thus suffer as I did.

I tried Mr. X's methods when I was a teenager. I really wanted them to work. I was a 100% committed if not obsessed bodybuilder. But because there were no qualifiers included with the articles stressing the need for great genetic good fortune to be able to cope with such a load, and because Mr. X didn't point out the drug involvement (on top of superior genetics), I thought the instruction was good for me too, with average genetics and no drugs. Countless others suffered the same way I did, and still are today, because the same sort of irresponsible training nonsense from the seventies that misled me is being reprinted/rehashed today.

I remember the first article I read that pointed out Mr. X's drug use, Peary Rader's IRON MAN magazine. That really gutted me. Even though it was 25 years ago, I recall it vividly, even the cover shot on the magazine. But the article didn't spill the whole truth on the drug front.

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Not only did Mr. X's methods not help me, they caused injuries, gross overtraining, and sickness. So they harmed me. These are facts. And I wasn't an isolated case. Millions of others have been affected in an adverse way, though you'll never read about this in the pro-Mr. X magazines and books. Despite all of this, Mr. X is still iconized by some people. It truly is an absurd world. But Mr. X is NOT the only guilty party. Just about every other "champion" bodybuilder since the steroids era began is also guilty of promoting overtraining and impractical and often harmful training methods, destroying the dreams of countless people, and giving weight training a bad name. I can't recall Mr. X ever claiming he was a hard gainer, but some very successful but scurrilous competitive bodybuilders have. Steroids were what "fixed" their perceived hardgainingness, and enabled them to train six days a week; but never was that mentioned in the magazines and books. Food supplements, "better" training, and more dedication were the "secrets," so we were told.

I'm not just venting my spleen here, but pointing out that Mr. X wreaked havoc, despite being presented as an icon in the bodybuilding world. Sure he inspired millions, but at the same time he misled millions; and his "instruction" robbed millions of people of some of the best training years of their lives. The ensuing desperation even drove many people to turn to steroids in an effort to make the pseudo training advice work. Lousy instruction fuels drug abuse, because without drug assistance those training methods just don't work for most people.

Though people who have suffered from the "train like a champ to become a champ" nonsense know the real score, endless gullible newcomers to bodybuilding don't, and they are going to tread the same well-worn path of deception and dishonesty that millions of people already have.

When sizing up Mr. X's contribution to bodybuilding, consider the following:

1. He presented himself as a role model for others to follow, with the implicit or explicit mantra, "train like Mr. X to be like Mr. X." Millions of people tried exactly that, in good faith. But they didn't get the full story. The role of genetics and drugs were not disclosed, so the masses were deceived big time.
2. Many people dedicated their lives to their bodybuilding, to imitate Mr. X, and sacrificed education, careers and balanced family lives, and all without even getting close to what Mr. X achieved.
3. Food supplements were touted as the "missing ingredient" for training success. Millions of dollars have been made by selling overpriced food supplements that didn't deliver what the hyped up claims said they could. Drug-fed supermen endorsing food supplements was a powerful commercial success for the companies involved, but again, the whole story was held back, and most readers really believed that the food supplements played a major role in the bodybuilding success of the men providing the endorsements. That drugs were the big component, and food supplements were neither here nor there relatively speaking, was kept quiet. So again, the bodybuilding masses were hoodwinked.
4. What has gone wrong in the past is still happening today. Mr. X is still one of the biggest names in the bodybuilding world. There are millions of newcomers to bodybuilding who will get sucked into the same mess that I did and millions of others too. So the fraud continues unabated.
5. Many people discovered that Mr. X's training methods do work IF you take enough steroids. So indirectly, the failure of the Mr. X-type methods to yield good results for the masses promotes drug abuse.
6. The drug abuse has caused deaths, countless health problems, crime, jail terms, ruined relationships, and devastated families. And it may even have at least contributed to Mr. X's own health problems. This isn't a pretty state of affairs.

An Eye-Opening Conversation with a Rising Bodybuilding Superstar

Brian T. Andrews

Not too long ago, my wife and I took a short trip down to Southern California for a day of fun and sun; notably in the Santa Monica/Venice Beach area. For those not too familiar with this vicinity, if you've ever seen "Baywatch" or almost any picture of a monster pro bodybuilder, it most likely was shot in "the" Gold's Gym in Venice Beach (the very one of "Arnold" fame).

Near the end of our day, I decided we should grab some dinner, at a place many of the locals in Venice Beach frequent, called "The Fire House." On any particular day, you might see a large mass (pun intended) of pro and amateur bodybuilders eating in there, maybe even a fitness model or two. And this is for a very good reason – the restaurant is just one block away from Gold's, and it caters heavily to the "fitness minded" individual. There's actually a special section on the menu devoted to bodybuilders, offering everything a growing body needs, just short of pharmaceuticals and syringes.

On this particular night, the place was quite devoid of famous "bodies" it's usually known for – except for one. While I'm not at liberty to disclose the identity of this individual, there's absolutely no doubt you would recognize his name, let alone his physique. At one time, this individual was at the epicenter of a very well known supplement company's massive marketing campaign. He appeared throughout their highly read newsstand magazine, had his torso plastered on the side of delivery trucks, and he was even featured on the cover of this company's supplement catalogue. In short, he was known as their "Spokesperson." We'll just call him "D-Man."

Coincidentally, we were seated just one table away from 'D-Man,' despite the rather empty room – fate I suppose. There he sat alone, typing away on his laptop computer and sipping a cup of hot tea. Recognizing him almost immediately, I explained to my wife who D-Man was and the role he played for 'Supplement Company X.'

I must mention the magazine which promoted him had just recently done a feature interview explaining how he was all but a cocky, mildly arrogant "lady killer." Supposedly, he had it all – money, fame, free supplements, access to gorgeous women – everything you'd expect from a guy who was quickly rising to the top of the fitness and physique world via a strong magazine and aggressive marketing campaign. After a few minutes, I decided to introduce myself to him.

Looking over at him, I politely inquired "Excuse me, but aren't you D-Man from Supplement Company X? With a big, friendly smile, he immediately shook my hand and affirmed his identity to me – this guy was no snob, let alone a conceited bodybuilding superstar. I then introduced my wife to him and asked how things were going for him with 'Supplement Company X.'

What followed was one of the most eye-opening encounters I have ever experienced. Never again will I look at this magazine or its parent company – or even the supplement industry as a whole – in the same light again. With a slight smirk and knowing chuckle, he launched into a diatribe that went on for literally an hour.

"First of all," he stated, "I really didn't appreciate the article they recently did with me. Did you see it? They made me sound like I constantly have my head in the clouds." He then went on to explain how they were trying to create an image of him that wasn't even close to his true personality. In other words, the reporter had embellished and exaggerated what the real D-Man was like. I then decided to ask him about his position as spokesperson for Supplement Company X. This is where things really got interesting.

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With yet another low chuckle, he explained how he didn't even use the products! He mentioned how he could get them at any time, as much he would want, he actually preferred regular food over supplements. What's more, he even said that he felt somewhat guilty telling others about these products or to even use them. "How could I tell some kid or a guy who works hard for his money to use this stuff, especially when I don't even really use them myself. The stuff is expensive!"

Despite what he was saying, I found myself struck by his sheer candid manner. Here I was, a perfect stranger, yet he was extremely open about this situation, just as he might be with his own brother. The magazine was completely wrong about him.

He then shared with me a very unbelievable story, one that demonstrates just how far some companies will go to extract money from the pockets of their trusting, sometimes gullible customers. He asked if I had ever seen or heard about a special protein bar that had just been reviewed in this company's magazine only a month or two before. I, in turn, replied that I had actually read the very article in which he was referring. I also told him how I even remembered how, in the very the next issue, Supplement Company X's CEO had offered to buy them back from anyone who had purchased them. He offered this because further tests revealed these bars were no where close to what the label showed – they were full of fat and had only half the protein claimed on the wrapper.

"Well," he exclaimed, "I have to tell you this was a complete scam. Company X's CEO already knew BEFORE he promoted these bars that they didn't meet label claims! He did this to make himself, and his company, appear 'honest' to his readers. First he sells them then offers to buy back any that were sold to his readers. It was all marketing, and the cheapest \$6,000 or so in advertising he ever spent."

He even explained to me exactly how he found out this damning information. While on a recent business trip to meet with the company's CEO and executives, D-man sat in on a meeting where they all laughed at how they had gotten away with this little con. D-man, however, expressed how he could only sit in complete shock, not believing his eyes or ears at what he was seeing and hearing. "Sure this company looks spotless from the outside, but once you're on the inside, it's a totally different story, believe me," he stated.

I too was shocked. While I hadn't bought any of these bars myself, I did remember reading about this exact incident in the magazine, and it had certainly worked on me. I thought this CEO was, indeed, a "saint" for being so "honest" with his customers. Surprise, surprise. The joke was on me – and possibly everyone else.

He went on reveal that his true passion in life was not bodybuilding, but writing. He was appreciative for his success in the physique world because it allowed him so much free time to pursue his literary ambitions – something he couldn't do in the typical 9-to-5 world. So much for the stereotypical image of a "hot-shot, brainless" muscle head. D-Man was a smart, honest and well educated man, all coupled with loads of ambition.

Toward the close of our conversation, he further explained how he had enough of dealing with the company, and he was planning to leave them as their official spokesperson. I thanked him for his time, shook his hand once again, and left for home with my wife.

Coincidentally, just a few weeks later, D-man was indeed no where to be seen in the pages of their magazine. He had done exactly what he told me... he left. Unlike his former employer, he was good on his word.

Needless to say, I was dumbfounded by what I had learned. While I had known this sort of thing happened everyday in the business world, I just didn't want to believe it would happen with such a well know and respected company...but it did.

If I had discovered anything from this "dose of reality," it was simply this:

Caveat Emptor ("Let the buyer beware.")

Persuasion in the Fitness Industry

Kevin R. Fontaine, Ph.D.

The fitness industry is big business. Consumers spend millions of dollars annually on an array of health and fitness-related products such as protein supplements, vitamins, herbal remedies, exercise equipment, and exercise apparel. With so much money at stake, it is not an exaggeration to say that competing companies go to war to secure an inordinately greater “slice of the pie” than the competition. The weapon of this war is advertising. Glitzy images, celebrity endorsements, and the selective presentation of factual information are all used to try to influence consumer decisions about a given product. In essence, the goal of each company is to persuade the consumer that their product is superior to that of the competition. Because there is little tangible difference between most of the fitness products sold by various companies, the key to success is to find a way to convince the consumer that “my product” is superior to “their product.”

The advertising agencies employed by the various companies must constantly develop newer and better approaches to marketing their products. To do this, they adopt many time-honored techniques derived from research in cognitive and social psychology. The purpose of this chapter is to briefly highlight some of these so that you, the consumer, will be in a better position to make a rational and informed choice the next time you contemplate purchasing a fitness-related product.

It’s All In Your Attitudes

Quite simply, the key to whether or not you decide to purchase a given product is your attitude toward that product. An attitude is your reaction (positive, neutral, or negative) to something (in this case a fitness-related product). If the advertiser can find a way to create a positive attitude in you toward a given product, they are more than half way toward getting you to purchase it. Attitudes have three components and advertisers try to “stimulate” all three in their effort to get your money.

The first is an affective or emotional component. That is, they want their advertisement of the product to elicit an emotional reaction in you. Perhaps the classic fitness example was the 98-pound weakling who had sand kicked in his face by the bully on the beach, promoted by Charles Atlas for his exercise program (see end of this chapter). For generations now, that simple scenario has elicited a powerful emotional reaction, especially in those who can readily identify with the experience. Once you are emotionally invested, you are more likely to consider purchasing the product in question.

The second component is cognitive. This simply refers to your beliefs about a given product. Ideally, your beliefs about a product are formed by your rational evaluation and appraisal of all the available information so that your decision whether or not to purchase is driven by facts, not by hype or distorted information. It is here where most advertisers of fitness products excel. Through the use of various techniques (some of which will be described below and in the next chapter) advertisers are often able to get consumers to forego, or at least limit, rational information-processing so that the claims made in the ad are not carefully questioned or evaluated.

The third component of an attitude is behavioral in nature. The ultimate goal of the advertiser is to get you to “do something” (i.e., buy their product). The culmination of the use of slick, carefully constructed advertising that appeals to your emotions and rushes you to incomplete cognitive processing is to compel you to behave as desired (to relinquish your cash).

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In sum, the key to successful advertising is the manipulation of attitudes. If a particular ad can get you feeling, thinking, and behaving the way the company wants, they are virtually assured of getting your money. Next are some of the specific ways persuasive communications attempt to do this.

The Routes of Persuasion

To alter someone's attitude in the way that you want, you must communicate. Most fitness products advertise in the mass media (i.e., magazine ads, infomercials). The advantage of these outlets, as opposed to personal one-on-one conversation, is that they are resource-conserving (you can get your message to many more people in a given time period), and, most importantly the information can be carefully prepared and controlled ("scripted") to ensure that the message is conveyed without interference from the consumer. A number of factors appear to be vital in creating a message that will be persuasive and, therefore, produce the desired results. These factors relate strongly to the processes by which people seek and evaluate the information presented to them. Two of the major ways by which people process persuasive communications are the central route and the peripheral route.

The central route refers to the process in which a person thinks carefully about the communication, influenced primarily by the strength of the factual information and arguments presented. This, of course, is the ideal process to use when confronted with an advertisement from the fitness industry. By carefully evaluating the credibility and validity of the statements and claims made in the advertisement, you are in the best position to make a decision based on your interpretation of the information and not on the hype and superficiality associated with presentation of the message (see below). Needless to say, most advertisers of fitness products – especially it seems supplements – attempt to create advertisements that make it difficult to engage in this form of processing. They try to *screen* or *mask* the factual information by packaging it in such a way that the consumer has to work really hard to “extract the wheat from the chaff.” In essence, they want you to respond to the packaging of the message rather than the message itself. This brings us to the bread and butter of the advertisers of fitness products, the peripheral route.

The peripheral route refers to the process in which the person does not think carefully about a communication and is influenced instead by the cues that are peripheral to the message itself. This route to processing has been used for centuries, being based on the notion that “The receptive ability of the masses is limited, their understanding small; on the other hand, they have a great power of forgetting” (Adolf Hitler, 1933).

By carefully staging the presentation of information, advertisers (and would be dictators) make it very difficult for consumers to move beyond the peripheral route of processing. In order to do so, consumers must have the ability and the motivation to do the hard work required to “see beyond”, in the case of fitness products, the well-muscled models who report “mind-boggling” gains while ingesting product ‘X’. The next chapter presents many examples and dissects several tricks of the trade used to encourage peripheral processing of fitness-related product information.

The Specifics of the Communication: Source, Message, and Intended Audience

Having identified two major ways we process the information designed to persuade us, consider the specific communication “tools” used by advertisers to encourage us to use their preferred mode of processing i.e., the peripheral route. These are the source of the information, the message itself, and gearing the advertisement to the intended audience.

The source refers to the spokesperson that pitches the product. In the fitness industry, the sources tend to be 1) an elite athlete or bodybuilder, 2) a “renowned” fitness expert (usually a well-known personal trainer), or 3) the testimonials of people like you and me who made tremendous progress while using a given product (before and after photos document this). If the company can find the right source, it goes a long way toward ensuring successful marketing of the product. Research has identified two characteristics of the source that appear to be most important. They are credibility and likability.

Milk Group

Did you ever notice that man is the only animal that drinks the milk of other species? Have you ever wondered why cow milk, not rat milk, mouse milk, or skunk milk? Why is cow milk relished and pushed on us as an essential element of diet, cow milk appetizing, but skunk milk not?

Each mammalian species produces a very unique milk designed specifically for promoting growth and development of the young of the species in question. Human milk is very different from cow milk or other non-human milks. For example, human milk contains a very high proportion of essential fatty acids (EFAs) required for development of the brain along with the nervous and cardiovascular systems that underlie the highly articulate human hand. In contrast, cow milk contains very little of these EFAs, so cows can't and don't grow large brains and must settle for insensitive hooves instead of hands. On the other hand, cow milk contains larger amounts of calcium and phosphorus, required for rapidly increasing body size – but not brain size – of the calf.

“At two years of age a calf will weigh 200 kg but have only 350 g of brain: a human infant at the same age weighs about 15 kg and [has] a brain weighing about 1.00 to 1.2 kg. Its brain is three times the size of the calf's, and in proportion to total body size it is around 60 times as big.”³ If raising humans on cow milk instead of human milk, this obviously will promote growth of large bodies but small brains; the results may not be fully human, i.e. rational animals, but beasts as dim-witted and as easy or difficult to manage as cattle or monkeys. I believe that you can see this kind of devolution at your local high school and sometimes more spectacularly on the nightly news, where reports of adolescent monkeys with shotguns have become all too common. Most of the development of the human brain occurs in the first two years of infancy, during which the infant requires omega 3 EFAs supplied by breast milk, but most American infants are breast fed less than three months, if at all.

It is usually asserted that consumption of cow milk is essential for provision of adequate calcium to keep the bones strong. However, cow milk has not proven to be a good source of calcium or a bone builder for humans. Epidemiological studies have shown consistently that nations with the highest intake of cow milk products also have the highest per capita incidence of osteoporosis and hip fracture. For example, Japanese do not regularly drink milk, and take in only 500 mg of calcium per day, but the incidence of osteoporosis in Japan is much lower than in the U.S., where milk is pushed on every woman and calcium intakes are 750 to 1000 mg per day.⁴ According to Michael Murray, ND, the Nurse's Health Study involving 77, 761 women showed that women who drink two or more glasses of milk per day had a hip fracture risk 45% greater than women who consumed one glass or less per week.⁵ A study published in the American Journal of Clinical Nutrition in 1985 showed that consumption of three 8 oz glasses of milk per day actually accelerated bone and urinary calcium loss.⁶ (You might be asking, Why weren't these findings front-page news? We'll get to that below.)

³ Crawford M and Marsh D, Nutrition and Evolution (Keats Pub., New Canaan, CT, 1995), p. 132.

⁴ Grant WB and Moore A, “The Role of Sugars in Ischemic Heart Disease”, Townsend Letter for Doctors & Patients, Feb./March 1999.

⁵ Feskanich D, et al.: “Milk, dietary calcium, and bone fractures in women: A 12 year prospective study.” Am J Public Health (1997) 87: 992-997, cited in “Bone Health”, Ask the Doctor Series, Vital Communications 1998.

⁶ Recker R, “The effect of milk supplements on calcium metabolism, bone metabolism and calcium balance,” Am J Clin Nut (1985) 41: 254.

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There are several ways that cows' milk could inhibit calcium utilization and promote osteoporosis. First of all, it has an unfavorable calcium: phosphorus ratio of 1.2:1; calcium absorption in humans is favored when the ratio is 2:1 or better in favor of calcium. Since meats and grains are high in phosphorus but low in calcium, adding dairy products to a diet based on either or both of these foods results in a diet containing more phosphorus than calcium. The high calcium ratio is more easily achieved if green leafy vegetables are the source of calcium, since they are low in phosphorus but high in calcium.

Cow milk also is a poor source of magnesium. In humans, magnesium is required for efficient absorption and utilization of calcium. When cow milk is ingested, blood calcium levels are elevated, but magnesium levels are not. This imbalance of calcium to magnesium may result in the calcium being unusable.⁷ Again, dark green leafy vegetables and some nuts and seeds are better sources of magnesium.

Another factor concerns acidity and alkalinity. Meat and grains are rich in acid elements, such as phosphorus, but poor in alkaline elements, such as potassium and calcium. Adding dairy products to a diet of meat and/or grains can actually increase the acid burden of the body, because dairy products provide more phosphorus. When the excess acid elements are in the blood, the body must neutralize them with alkaline elements, including calcium; the excess elements and their neutralizers are then excreted in the urine. Vegetables and fruits are high in alkaline ash, specifically potassium, so they counter balance the acid load of meat and grains, reduce acid and calcium excretion, halt bone loss and allow bone accumulation to occur even if protein intake is high.⁸ As noted above in our discussion of whole grains, research has indicated that diets high in vegetables help to increase bone density (see note 4).

As noted, cow milk is designed by Nature for only one consumer – a baby cow. It contains over 25 different proteins that cause allergies in humans.⁹ Cow's milk is the most common cause of allergies among infants. If given to infants, cow's milk protein can stimulate the immune system to attack the pancreas, destroy the cells that produce insulin, and hence cause insulin-dependent diabetes.¹⁰ Other reactions linked to cows' milk allergy include¹¹:

Gastrointestinal: Canker sores, vomiting, colic, stomach cramps, abdominal distention, intestinal obstructions, bloody stools, colitis, malabsorption, anorexia, diarrhea, constipation.

Respiratory: Nasal stuffiness, runny nose, otitis media (ear infections), sinusitis, asthma.

Skin: Rashes, atopic dermatitis, eczema, seborrhea, hives, enlarged tonsils and adenoids.

Behavior: Irritability, restlessness, hyperactivity, headache, lethargy, fatigue, allergic tension-fatigue syndrome, muscle pain, mental depression, enuresis (bed-wetting).

Blood: Abnormal clotting, iron deficiency, low serum proteins, low platelets.

Other: Sudden Infant Death Syndrome, anaphylactic shock, leukemia.

⁷ Evans, GH et al, "Association of Magnesium Deficiency with the Blood lowering Effects of Calcium," *Journal of Hypertension*, vol.8 (1990), 327-37; Sojka JE and Weaver CM, "Magnesium Supplementation and Osteoporosis," *Nutrition Review*, vol. 53 (1995), 71-74.

⁸ Crayhon R, "The Paleolithic Diet and Its Modern Implications: An interview with Loren Cordain, PhD", *Townsend Letter*, November 1998, p. 144.

⁹ Bahna S, *Allergies to Milk* (New York: Grune and Stratton, 1980).

¹⁰ Scott FW and Kolb H, "Cows' Milk and Insulin-Dependent Diabetes Mellitus", *Lancet* (Aug 31 1996) 348: 613

¹¹ This list is taken from McDougall JA and MA, *The McDougall Plan* (Clinton, NJ: New Win Pub., 1983), Chapter 5. Dr. McDougall provides over 35 references documenting the ill effects of dairy consumption.