



Dear Associates:

From the early days of the company's founding I have known that Mannatech held the key to a nutritional technology that would one day help change the paradigm of health. Pioneers always face challenges. The change they initiate can be disruptive to the unprepared. In the scant 14 years since inception, the company has faced its share of adversity. But we, as a company, must never lose sight of our goal and our mission. Let us remain steadfast in the knowledge that Mannatech stands on the foundation of a growing body of knowledge of the role diet plays in human health and wellness, efficacious products and an undying commitment to offering consumers worldwide nothing short of the absolute best, proprietary products.

Our success in blazing a new frontier in nutritional supplementation is evident: we have been recognized for our financial management by some of the nation's leading business magazines as among the best and fastest-growing small companies in America; we are known for the efficacy of our products; we hold more than 40 patents domestically and internationally on technology related to Ambrotose; we have hundreds of thousands of consumers worldwide who, satisfied with our products, automatically reorder product month after month, year after year.

In an effort to provide you with the information you need, as Associates, to answer queries about Mannatech and its products, we've provided this list of Frequently Asked Questions.

Sincerely,

A handwritten signature in black ink that reads "Sam Caster".

Sam Caster
Chairman and Chief Executive Officer

Frequently Asked Questions

Can the body utilize the complex carbohydrates in Ambrotose?

One medical researcher, Hudson Freeze, Ph.D., has stated to the media that the complex carbohydrates in Ambrotose cannot be digested by the body. This researcher has not conducted a single trial to substantiate the claim, nor are there any published studies to support this hypothesis. This critic apparently bases his claim on assumptions that were once thought to be true but which have never been verified. The human gastrointestinal (GI) tract is an enigma and, as such, it continues to be a subject of scientific research. Some studies suggest that the GI tract, which is home to approximately 75 percent of the body's immune system, may indeed be digesting these dietary sugars. Recent collaborative [research](#) between Mannatech and a third-party institution showed that bacteria from the GI tract are capable of breaking down these complex saccharides. A poster presenting the data from this collaborative research won a first-place award at a January 2007 conference on natural supplements sponsored by the widely respected Scripps Center for Integrative Medicine in La Jolla, California. In addition, John Axford, M.D., chairman of clinical rheumatology at St. George's University of London, recently released the results of a small-scale pilot study, which suggests that the complex carbohydrates in Advanced Ambrotose are utilized by the body. To further explore these initial results, Dr. Axford is spearheading a follow-up study that will include more participants and apply enhanced experimental design.

Is it necessary to consume the dietary sugars in Ambrotose? Can't the body use glucose to make these other sugars?

The glucose-only theory claims the body can readily convert glucose into all other glycoprotein sugars, making it unnecessary to add these sugars through diet or supplementation. However, the glucose-only theory is just that – a theory. It is not established science. Some studies and medical textbooks say as much. A study published in [Metabolism](#) (Vo. 47, No. 12, December 1998, pp 1499-1503) entitled *Dietary Specific Sugars for Protein Enzymatic Glycosylation in Man* states: “Although it is sufficient for energy requirements, glucose alone is not sufficient for protein enzymatic glycosylation . . .” and “. . . specific dietary sugars could represent a new class of non-essential nutrients displaying interesting metabolic roles.” This conclusion – reached nine years ago – dovetails with recent biomarker studies and research by John Axford, M.D., chairman of

clinical rheumatology at St. George's University of London, that highlights the changing cellular sugar profiles exhibited from consuming the complex saccharides found in Ambrotose. It is now well known that the body has methods of absorbing key sugars independently of and preferably from glucose. The fact that glucose-independent pathways exist for the absorption and utilization of sugars is evidence, indeed, that these sugars are expected to be in the diet. These sugars, and many other vital nutrients, are frequently deficient in our modern diets. In a [2006 news segment](#), ABC News acknowledged that the nutritional value of many of our most popular fruits and vegetables have been dramatically compromised over the last several decades. Research has shown that, in some situations glycoprotein structures lack one or more of these vital sugars. In other words, a vital sugar is missing from the glycoprotein structure. This would indicate that, for whatever reason, the body could not provide a vital sugar. The role diet plays in glycoconjugation intrigues Mannatech as well as glycobiologists around the world.

And finally, the claims that the body cannot digest these saccharides or benefit from them once digested ignores the dozens of quality of life improvement studies and the positive responses reported by hundreds of thousands of customers who continue to consume our unique products.

If Ambrotose is effective, why aren't there any articles on it in the National Library of Medicine?

The National Library of Medicine (www.PubMed.com) is the repository for peer-reviewed studies. It is not surprising that Ambrotose is not listed because Ambrotose is a brand name, and these articles do not focus on a brand or a company. Ambrotose is comprised of a blend of components, including aloe vera gel, arabinogalactan, fucoidans and others that are referenced often on PubMed.

There are many studies validating the benefits derived from consuming Ambrotose. But since they are not double-blind, placebo-controlled trials, are they really valid?

Double-blind, placebo-controlled trials are considered the "gold standard" by the scientific community. Conducted under rigorous standards, these trials can take years to complete and cost many millions of dollars. Because double-blind, placebo-controlled trials generally focus on a single "intervention," such as a particular drug or ingredient, they are more difficult to effectively design, interpret and execute in the context of the total diet. Moreover, it may not be possible to

design a double-blind, placebo-controlled trial to measure every physical effect we might like to examine, or to run such a study within a reasonable timeframe. Nutritionists and other scientists, therefore, often rely on other forms of experiments to demonstrate the effect of a nutrient on the body. Combining the results of various types of tests can often provide scientists with a great deal of information about the way a nutrient is utilized by the body, even in the absence of double-blind, placebo-controlled studies.

None of the regulatory agencies in the 10 countries where Mannatech sells its products – including the United States – requires double-blind studies before a nutritional supplement can be marketed. It would be unreasonable to require double-blind studies within this industry. Congress may have been alluding to this when crafting the [Dietary Supplementation Health and Education Act](#), which states “. . . the Federal Government should not take any actions to impose unreasonable regulatory barriers limiting or slowing the flow of safe products and accurate information to consumers.”

That’s not to say a nutritional supplements company cannot willingly conduct double-blind studies. As a science-based company, Mannatech values scientific validation. We believe Mannatech stands as a leader within its industry when it comes to using science to substantiate the efficacy of its products. One must understand, however, that research is conducted in a continuum. Even pharmaceutical companies do not begin testing a new drug with double-blind studies; they begin with smaller cross-sectional, case-control and prospective and dose-response studies. This research [protocol](#) is outlined in a recommendation by the FDA’s Center for Food Safety and Applied Nutrition. This protocol is discussed in numerous publications, including [Marginal to Mainstream](#) (Cambridge University Press), a book by Dr. Mary Ruggie stating that this continuum of research – including anecdotes, case studies and observations – “not only spark curiosity but also can be helpful in guiding clinical care . . . Mainstream medical journals have been publishing case and observational studies for years (page 117).” The author states that the medical research community may be beginning to recognize the independent value of these methods.

The collaborative studies Mannatech has conducted since the company’s inception 14 years ago follow this same kind of protocol. The more than two dozen existing studies on the benefits of glyconutritional consumption – the studies that critics say are not valid science – adhere to the

same protocol used by the research profession worldwide. Mannatech is now collaborating on more stringent studies of its products, including double-blind trials. Consider the following:

- Mannatech has spent nearly \$20 million on R&D since 2002;
- Mannatech has 11 collaborative studies scheduled to begin in 2007. These studies include: 5 randomized, placebo-controlled clinical trials; 3 open-label clinical trials and 3 pre-clinical trials.
- At least 5 of the current studies will be completed by the end of 2007 and will be submitted for poster presentation and/or publication in peer-reviewed journals by 2008.
- One [study](#) completed in 2006 received a first-place award in a poster presentation at the Scripps Center for Integrative Medicine during the 4th annual conference on natural supplements. This study has also been accepted for publication in the peer-reviewed *International Journal of Probiotics and Prebiotics*.

Mannatech paid for many of these studies. Doesn't that call into question their validity?

It is common practice for academic and clinical scientists to receive funding from private industry to conduct research. Public record shows that the vast majority of clinical research on pharmaceuticals and nutritional supplements is funded by the companies who own the products. Some of these studies are incredibly expensive to conduct and would never see the light of day without this funding. Mannatech is a science-based company and, as such, it funds research focused on its glyconutritional products. The clinical scientists conducting these funded research endeavors ensure the integrity of their work, including employing a number of checks and balances, third-party analysis and working within a team. The fact that Mannatech funds its research does not compromise the ethical standards of the organization or persons conducting the research, and moreover, the company always discloses its support.

Do Mannatech Associates make improper claims regarding the company's products?

Dietary supplements do not treat, cure or mitigate disease. Mannatech places this statement on the label of every nutritional supplement it sells. Nor are dietary supplements meant to replace the care and oversight provided by physicians. Mannatech trains its associates on the role nutrition plays in a person's quality of life, regardless of the person's state of health.

Mannatech takes seriously the proper use of product marketing materials and the various forms of educational materials allowed for distribution under DSHEA. We provide a brochure to every Associate on how to recognize and use them appropriately. If one does not understand this law, one can mistakenly think a person is making a health claim about a product when, in fact, they simply are sharing educational materials. The company has an active Compliance Department that vigorously pursues reports of Associate non-compliance with Mannatech policies and procedures. Among other things, the Compliance Department investigates Associate-produced Web sites that link the Mannatech brand with inappropriate health claims, income misrepresentations or other potential policy violations. The company has a toll-free hotline for any member of the public to report an alleged violation.

Do Mannatech and its Associates target sick people?

A majority of American adults consume dietary supplements as a part of a holistic approach to better health. This trend is occurring at a time when American healthcare is in crisis. Hardest hit are those whose health is compromised; unable to obtain relief entirely from standard of care, they eagerly seek quality-of-life improvements through complementary therapies. In a law passed with unanimous consent (the [Dietary Supplement Health and Education Act](#)), the U.S. Congress in 1994 stated that “there is a link between the ingestion of certain nutrients or dietary supplements and the prevention of chronic diseases such as cancer, heart disease and osteoporosis.” Congress passed the law in response to the groundswell of support from the public seeking to take a proactive approach to health. The law allowed members of the supplements industry to distribute educational materials discussing the specific benefits of dietary ingredients. Dr. Roger Williams, past president of the American Chemical Society, wrote in his book, *Nutrition Against Disease*, “The human body heals itself and nutrition provides the resources to accomplish this task.” Countless studies have shown quality of life improvements through the dietary intervention of Ambrotose.

Did the Texas Attorney General investigate Sam Caster’s other companies?

Sam Caster is no stranger to the controversy that surrounds the introduction of disruptive technologies – the technologies that change the paradigms of the way things are done. This is the case with Eagle Shield, a network marketing company Caster founded during the mid-1990s. Eagle Shield’s main product was a new energy-saving product called ‘radiant barrier’ – an

aluminum-based insulation technology born out of NASA's space program. Based on the heating/cooling bills from radiant barrier customers, the company estimated the insulation could save homeowners between 10 percent and 20 percent monthly on their monthly energy bills. The Texas Attorney General challenged the "amount" of savings in "average" homes. To resolve the issue, Eagle Shield agreed to limit its energy-saving claims to 8 percent until the company could commission an independent energy firm, Texas Energy Engineers, to research energy savings in a way acceptable to the Texas Attorney General. Meanwhile, Eagle Shield signed a "no fault consent decree" with "no admission of guilt." The energy firm presented its research findings at the 12th World Congress of Energy, validating Eagle Shield's original consumer claims, saying radiant barrier could save up to 24 percent on energy bills. Today, radiant barrier (under various brand names) is required by many building codes nationwide. NASA's magazine, [Spinoff](#), published a story about radiant barrier recently.

About the same time, the Texas Attorney General also challenged Eagle Shield to provide scientific validation for ElectroCat, an electronic pest control device the company marketed. This product came on the market during a time when society was increasingly conscious about pesticides and toxins and the effects on the body. Research on the ElectroCat was inconclusive. Creating an undesirable environment for pests through electronic sound waves did not favorably compare to killing pests with poison. However, the tradeoff – electronic pest control is less effective, but poison-free – is gaining renewed popularity. Today, more than 60 varieties of electronic pest control devices, including a product marketed by Black & Decker, are widely available in some of America's largest retail chains.

Did Mannatech hire a felon?

One of Mannatech's co-founders was Bill Fioretti. Many years before Fioretti and Sam Caster co-founded Mannatech, Fioretti was convicted on marijuana-trafficking charges and served several years in federal prison. Caster asked Fioretti to become his partner because Fioretti was a brilliant individual with a good understanding of biochemistry. None of his past legal experiences had anything to do with Mannatech, nor did they affect his relationship as chief science officer of the newfound company. Fioretti left the company in the late 1990s to pursue other opportunities.

Is it true that lawsuits have been filed against Mannatech?

Mannatech is the subject of a class-action lawsuit filed in 2005. The class-action suit has not been certified as a class action nor has a judge declared that it has any merit. Following the filing of the class action, Mannatech's executives were sued by individual shareholders in "derivative" lawsuits raising similar claims. Mannatech has a team of nationally recognized legal specialists to handle the class action and derivative litigation, which the company believes are without merit and will be defended vigorously. None of the litigation has been set for trial.

Given the legalistic nature of the American culture, it is no wonder that many companies find themselves in court – many times without merit. An opinion article in the *Wall Street Journal* in 2006 stated that approximately 60 percent of the companies listed in the Dow Jones Industrial Index had been hit with class action lawsuits.

Some people have a vested interest in hurting a company's stock price; these people are known as "short sellers." Through trading, they can make a profit if a company's stock goes down in value. To accomplish this, some short sellers actively seek out media that are willing to write stories about lawsuits pending against a company. When these stories are published, the general public – which doesn't understand that allegations in a lawsuit are opinions that have not been scrutinized by the court – might be spooked into avoiding the company or, if they are shareholders, selling the stock. Mannatech believes it finds itself in this very position.