

# Questions & Answers

## **What is Suspension Gel Technology?**

Suspension Gel Technology uses a state-of-the-art science to put nutrition in a state of suspension in a gel.

## **What are the advantages of Suspension Gel Technology?**

There are two key factors that influence the efficacy of any nutritional supplement: the timing of the ingestion, and the bioavailability of the nutrients. The convenience of the portable gel pack delivery system that Agel uses allows first for the proper timing of ingestion to correctly correspond with meals, which in turn enhances the overall absorption and use of the nutrient. And second, the Gel Technology forces the critical nutrients to remain suspended in gel, thus optimizing the bioavailability of those nutrients when ingested. Traditional supplements found in pills and capsules do not always fully absorb in the digestive track, allowing a portion of the critical nutrients to travel through the digestive track without ever interacting with the lining of the stomach or intestines.

## **How are the nutrients in Agel products absorbed?**

Ingredients in each of the products contain nutrients that have specific (although widely different) methods of absorption along the gastrointestinal (GI) tract. For most of these nutrients, the primary location is in the small intestines. By suspending nutrients in a gel, all of the nutrients are readily available to be digested and absorbed in the GI tract.

## **Where can I find additional research and product information?**

All current product information can be found in the Products section Agel Website at [www.agel.com/products](http://www.agel.com/products). We encourage you to do your own research.

## **Agel FIT**

FIT compliments your weight control program, along with eating right and exercising. That's because it contains a patented natural ingredient that prevents your body from storing unused carbohydrates and, when used before eating, inhibits fat production. It can also reduce your desire to eat when you're not hungry.

## **Agel MIN**

MIN gives you the exact amounts of vitamins and minerals you need everyday. Better yet, it provides this essential nutrition in a great-tasting gel that's easy to swallow, easy to take with you, and easy for your body to absorb. MIN just might make the vitamin pill extinct.

## **Agel EXO**

EXO is a unique blend of exotic fruits and plant extracts- seabuckthorn, noni, mangosteen, and açai, to name a few. Each is good for you, but they're even better together, since a wide variety of natural nutritive sources is the way to fully meet your nutritional needs.

## **Agel OHM**

Agel OHM is a wonderful tasting blend of energy-creating herbs, Taurine, D-Ribose, and complex B vitamins. Its purpose is to convert a healthy diet into usable and sustained energy and to sustain a healthy lifestyle.

## **Agel UMI**

UMI contains Fucoidan, perhaps the most exciting nutritional discovery in the last decade. There are many potential health benefits from Fucoidan, which is found in seaweed, a plant long associated with good health.

**Are Agel products Halal Certified?**

No. Not all Agel products have been Halal Certified by the Islamic Food and Nutrition Council of America (IFANCA). Currently EXO, MIN, UMI, OHM and FIT are Halal certified; PRO and FLX are not.

**Are Agel products Kosher Certified?**

No. Not all Agel products have been Kosher Certified by the Union of Orthodox Jewish Congregations of America (Orthodox Union). Agel is in the process of obtaining additional Kosher certifications in Israel. Currently EXO, MIN, UMI, OHM and FIT are Kosher Certified; PRO and FLX are not.

**Are artificial colors used in the formulation of the gels?**

No. The color in the gels is a result of the natural color of the ingredients.

**Should pregnant woman use Agel products?**

There are some ingredients in Agel EXO that have been listed in some texts as not appropriate for pregnant women. Consequently, we recommend that pregnant women not consume EXO. If you are pregnant, prior to taking any vitamin, herbs, supplements, or over-the-counter medications, we recommend that you consult with your physician.

**Can women take Agel products while breast-feeding?**

We recommend that you review the ingredients in these products with your physician prior to using them while breast-feeding.

**Should children use Agel MIN?**

As a point of reference, the American Academy of Pediatrics does not endorse vitamin supplementation in children under the age of 16, except for specific groups with chronic illnesses. Furthermore, the mineral needs of children are unclear.

Agel MIN contains 100 percent of the RDI of the essential vitamins and selected essential minerals for adults. Most children's vitamins currently on the market contain about the same amount of vitamins as Agel MIN, without the minerals. If you elect to use Agel MIN for your children, the preparation does not contain enough of the vitamins or minerals to be considered dangerous; however, an entire pack of Agel MIN is probably more than necessary. We recommend consulting with your pediatrician about appropriate dosing of the vitamins and minerals for your children.

**Should children use Agel FIT?**

We recommend consulting with your pediatrician about appropriate food supplementation and weight management regimens for children. As a general rule, we do not recommend diet aids for children, and we therefore do not recommend using Agel FIT in the pediatric population. We do advocate healthy eating habits and plenty of physical activity as a means for children to manage weight. To initiate an early habit of dependence on dieting aids in childhood may be sending the wrong message.

**Can I take all four Agel products in the same day?**

We recommend that you consult with your physician before consuming multiple Agel products on the same day.

**Are Agel products "All Natural?"**

All of the ingredients in the Agel products come from natural sources except the preservative Sodium Benzoate and the synthetic Taurine found in OHM. Synthetic Taurine is preferred over natural Taurine because natural Taurine is derived from bile. In order to be sensitive to all Agel team members' varying religious beliefs, the synthetic source was chosen.

### **Are there any drug interactions related to any of the Agel products?**

We are only aware of two potential drug interaction concerns. They involve anyone taking medications that increase serotonin levels. In particular, medications in the category of SSRI's (Selective Serotonin Re-uptake Inhibitors) are of concern. We strongly advise consultation with your physician prior to using Agel FIT or OHM if you are taking these medications. In Agel OHM, panax ginseng is one of the active ingredients and may cause increased serotonin levels in the brain. Agel FIT has Hydroxycitric Acid (HCA) as its primary active ingredient. HCA has been shown to be effective in part by its ability to reduce appetite by increasing brain serotonin levels. In general, for individuals taking medications that increase brain serotonin, there is a theoretical risk of serotonin syndrome.

### **Exactly what is the glycemic index (GI) of our Agel products?**

Crystalline fructose, the sweetener in Agel products, has GI of 32. Guar gum and Xanthan gum are the soluble dietary fibers that are used to form the "gel." Many foods containing soluble dietary fibers tend to have a lower GI.

### **Why do the Agel products contain "Guar Gum"?**

Agel uses guar in combination with xanthan gum to form the unique gel matrix which is the core technology of the Agel products. The guar gives the gels their structure and contributes the ability of the gels to facilitate availability of the active ingredients. It is not present as a bulking agent for any satiety effect.

Guar gum is Generally Recognized as Safe (GRAS) with differing percentages set for its allowable concentration in various food applications. It is approved by the FDA for use as an emulsifier, thickener, and stabilizer.

### **Does apple cider vinegar have alcohol in it?**

There is no alcohol in apple cider vinegar. Halal certification indicates there is no alcohol and is acceptable in cultures and social groups where alcohol is forbidden.

### **What clinical trials or research do you have on the products?**

Determination of specific clinical trials on Agel products are currently in process. The individual ingredients in all Agel products have substantial scientific literature and study behind them. You can do a scientific search for studies related to each ingredient on [www.pubmed.gov](http://www.pubmed.gov). This is the U.S. National Institutes of Health sponsored library of peer reviewed published journals from around the world.

### **What are the sources of active ingredients used in Agel products?**

Some of the most commonly queried active ingredients include:

- Aronia comes from Europe and N. America
- Acerola comes from S. America
- Elderberry comes from N. America and Europe
- Noni comes from the Tropics
- Gac comes from S.E. Asia
- Mangosteen comes from S.E. Asia
- Acai comes from the Amazon
- Glucosamine comes from shellfish
- Chondroitin is Bovine sourced
- Celadrin is Bovine sourced
- Taurine is synthetic
- Ribose is created through a fermentation process, using a glucose starting point
- Rhodiola comes from Russia and Asia

### **What is ORAC? How does it relate to EXO?**

ORAC refers to **Oxygen Radical Absorbance Capacity**. This is a test done in a lab to determine the potential antioxidant power of a particular food. Since the test is performed in a lab while it does indeed indicate antioxidant capacity, it does not necessarily reflect what will be the effect in a particular person's body. We are all metabolically different. ORAC capacity alone does not take into account that antioxidants have been shown most effective when they come from a **variety** of food sources. The USA formulation of EXO has 17 exotic fruits and the ORAC reading is 46 mmol TE/gm. That would be 4,600 per 100 grams, or 978 per packet.

### **Which products are vegetarian — i.e. no meat and fish products included. Are any of them Vegan?**

All of the products are Vegetarian with the exception of FLX. PRO (protein from dairy), FLX (ingredients from beef and shellfish sources) and MIN (vitamin D is from lanolin which is derived from sheep's wool) are not Vegan.

### **What is the source of the sweetener in Agel products?**

It is crystalline fructose. Instead of artificial sweeteners, fructose (crystalline, not high fructose corn syrup) is a natural sweetener. Crystalline fructose is a sugar made from corn that has a low glycemic index (GI) and therefore doesn't cause the larger rise in blood sugar that table sugar (sucrose) does. Using fructose as a natural sweetener instead of sugar may help decrease caloric intake, since it is 1.5 times as sweet as table sugar, but has the same caloric density. In other words, instead of three teaspoons of sugar, you need only two teaspoons of fructose to achieve the same level of sweet taste.

### **What are the components that make up the natural flavoring? Are they derived from natural sources?**

Some of the flavorings in our gels include the three organic compounds: ethyl acetate, ethyl butyrate, and glycerin.

Many organic compounds that are a mainstay of our own biochemistry have names that sound synthetic or like compounds that may have come from a test tube. Organic compounds have a chemical structure (if you ever studied organic chemistry) that include many hydrogens and carbons. When you write it out it looks like several C's and H's strung together.

Organic biochemical compounds that you may recognize easily include: Carbohydrates, sugars, enzymes, hormones, lipids and fatty acids, neurotransmitters, proteins, peptides, amino acids, vitamins. Having said that, the components of the "natural flavoring" in Agel products are considered esters which are also organic compounds derived from fruits such as oranges, bananas, and apricots. These "natural flavors" derived from fruit are organic compounds (esters) called **ethyl acetate and ethyl butyrate**. Both are considered very safe by the Joint Food and Agriculture Organization of the United Nations and the World Health Organization Expert Committee on Food Additives.

A third organic compound in the "natural flavoring" is **glycerin** which meets the requirements mandated by U.S. Food & Drug Administration (FDA) regulations for use in foods, drugs, medical devices and certain other products requiring ingredients of the highest purity.

Glycerin, sometimes spelled glycerine, is a product (or by-product of our own metabolism) whose principal component is glycerol. The terms glycerin, glycerine, and glycerol are often used interchangeably in the literature. Glycerine can come from food sources (fat, phosphoglycerides, glyceryl esters, and other miscellaneous sources), supplements, and from the liberation of our own stored body fat.

Glycerin as a commercial product meets the stringent requirements of the United States Pharmacopeia (USP) and the Food Chemicals Codex (FCC). Glycerin is used in many food products because of its contribution to product properties, stability and compatibility with a wide variety of ingredients, and safety.

The FCC or the Food Chemicals Codex is an internationally recognized compendium of monographs covering food ingredients. It contains specifications for many direct food additives, such as glycerin. The Institute of Medicine of the National Academy of Sciences developed and maintains the FCC. The FDA also supports this compendium.

### **What is the purpose of the sodium benzoate?**

Sodium benzoate is a preservative. The FDA allows 0.1% sodium benzoate in foods. A can of Soda is 12 fluid ounces (355 ml) or approx. 355 grams. 0.1% of that is 0.355 grams or 355 mg of Sodium Benzoate. In each packet of Agel products we use 3 mg of sodium benzoate... that's right... 3 mg. That works out to less than 1/100th of the amount of sodium Benzoate allowable in a can of soda.

We had to preserve the products with something. We chose the smallest amount of the least offensive substance we could find. We say that understanding that a certain percentage of people will be unhappy with what ever decision we make.

### **What laboratory tests have been conducted on the Agel products?**

The analyses that Agel run on each batch of products give us confidence in four areas:

- Microbiological — these measurements ensure that there are no microbes in the products that would cause problems either for storage or to the end user.
- Nutritional — these measurements ensure that the products have all the right nutritional components in them, in the correct proportions so that the products do what we say they will.
- Banned Substances — these measurements ensure that the products do not contain any substances that would show up as positives in anti-doping testing of athletes so that athletes can use the products with confidence.
- Stability — these measurements ensure that the contents of the gel packs do not change appreciably over time so that what leaves the production facility still does everything it is supposed to after 3 months, 6 months or a year.

### **Does the Mangosteen in EXO contain the whole fruit including the skin?**

Yes, it includes the pericarp as well as the whole fruit and the skin. The pericarp is in the rind of the Mangosteen and contains most of the antioxidant Xanthones. It could be compared in structure to the white internal rind of an orange.

### **What is the source of the Guar Gum and Xanthan Gum in Agel products?**

The Guar gum comes from the root extract of the Guar plant and Xanthan is created through a yeast fermentation process.

### **If I want to do some of my own research on the ingredients in Agel products, where can I find more information?**

The first place to locate accurate scientific information is at [www.pubmed.gov](http://www.pubmed.gov). This is the U.S. National Institutes of Health sponsored library of peer reviewed published journals from around the world. When using an online search engine to investigate ingredients for information keep in mind that rankings are based on the number of times the search term appears on the entire internet including in news groups, blogs and chats. What this means is that when there is lots of discussion about a subject it will receive a high ranking whether what is being discussed is true or not. A good conspiracy will get a great ranking whereas a boring set of accurate facts will get a poor ranking. You be the judge.

**What is the source and amount of the fucoidan in UMI?**

We use 210 mg of fucoidan sourced from Laminaria japonica which is a type of brown seaweed found in Asian waters.

**How are the products processed and specifically do the procedures involve hot or cold temperatures?**

Yes, all Agel gels are subjected to heat processing for about 30 seconds at 175 F. This short time at a high temperature assures that the product is free from microbes, but is so quick that virtually none of the nutrients are lost.

**How does the OHM product compare to the energy drinks?**

Most energy drinks contain sugar and caffeine. OHM does not use this approach. The vitamins, ribose, and herbs in OHM allow a person to sustain energy and get the most out what they already have without ramping up the central nervous system. Red Bull is a CNS stimulant combined with quick carbs (sugar).

Gu is maltodextrin with perhaps some caffeine — very similar in concept to the energy drinks. These will provide the endurance athlete with the carbs that they need to keep going. Ohm will allow the person to maximize the usage of these other products.

It is not accurate to compare OHM with caffeinated drinks. There are no stimulants in OHM and it is not designed to give a chemical boost of energy. The B vitamins are to help metabolize food for better utilization of the energy in food. The herbs are “Adaptogens” which are to help the body deal with what ever stresses it encounters; exercise, stress, lack of sleep, etc.

**How do we know exactly what ingredients are in each product?**

Each box of product has a label on the box with supplement facts and ingredients. Each individual foil packet has a brief general description of the contents of the packet. Consumers may download ingredient and nutritional information from the Agel Corporate website at [www.agel.com](http://www.agel.com). Go to the products section and locate the descriptions of each individual product. At the end of each product description you will see a downloadable fact sheet that is a duplicate of the nutrition facts and ingredients information that appears on each box.

**EXO and UMI seem to have similar benefits. How is each unique?**

EXO supplies the multifunction antioxidants to counteract free radicals. These are generated by normal day-to-day metabolism, oxidative load from exercise, some environmental pro-oxidant toxins and UV rays. These free radicals will be present whether or not systems such as the immune system, lymphatic system and circulatory system are operating normally. They are responsible for the background symptoms of the aging process. They are a baseline expectation which would normally be handled by a baseline intake of food-borne antioxidants but because these are lacking in many modern developed world diets we need to supplement them.

UMI supplies fucoidan which in turn supplies supplementary saccharides that we do not normally get even in a good developed world diet. These saccharides have a range of properties including being antioxidant but their primary benefit is their ability to supplement saccharide stores in cells. Those stores allow the cells to produce good quality message molecules — glycoproteins. The cells in which this is most important are parts of systems which need to communicate to get their job done — the immune system, the nervous system, the endocrine system. These glycoprotein molecules are the language of that communication. To remedy those nutrient deficiencies we need a source of saccharides.

You need EXO if your diet doesn't contain many servings of fruits and vegetables or free radical exposure or production is excessive. EXO will provide the baseline requirement of antioxidants.

You need UMI if your cellular communication systems need to maintain proper function. UMI will provide the additional saccharides that are missing from the modern diet and get communication working again.

**Why do the nutrition facts labels on Agel products say that the packets contain a varying number of grams of sugar? I thought the sweetener was fructose.**

Nutrition Facts Labels will say ‘sugar’ if a food product contains any kind of carbohydrate that basically ends in the letters ‘ose’. Food labels don’t distinguish between kinds of sugar. For example, carbohydrate from fruit (fructose) or milk (lactose) or table sugar (sucrose) will all appear as ‘sugar’ on a food label. For instance one serving of fruit canned in fruit juice has 14 grams of sugar and 1 cup of skim milk has 12 grams of sugar. Yet neither of these foods has sugar “added” to them. Trying to recognize sources of added versus natural sugars may be a bit confusing at times. If it comes from a food, such as fruit in EXO and or in milk products, it is not an added sugar. Remember that moderate amounts of sugar, no matter what their source, can be part of a healthy diet.

**How much sugar is appropriate?**

Dietary guidelines recommend up to 10% of your carbohydrate intake can come from “added” sugar. So based on a 2000 calorie diet, depending on your goals and health needs, added sugar could be up to 30 grams per day or 120 calories. One might have up to 300 grams total carbohydrate or 1200 calories of carbohydrates or 60% of total calories in whole grains, fruits and vegetables.

**Why did my skin feel hot and appear slightly red with OHM?**

OHM contains B3 in the form of niacinamide. It can have a flushing reaction. Sometimes the skin temporarily feels hot and gets red and sometimes a rash appears, but then disappears after a while. It is not harmful, just a bit scary if never experienced before. Niacin flush is an infrequent response to niacin that is completely harmless and easily explained. One of niacin’s important benefits is its ability to dilate blood vessels and thereby increase blood flow to various organs of the body. Superficially, the increased blood flow may sometimes result in a blush of the skin and a sense of warmth. If flushing does occur, we recommend starting out with part of a packet and gradually increasing dosage over time; take with food and avoid consuming with warm beverages. If a reaction does develop, then drink lots of water and relax. It will pass shortly. So why include niacin in our products? Quite simply, their effectiveness is enhanced greatly by niacin. In fact, niacin is an essential vitamin that allows hundreds of critical chemical reactions to take place in our bodies.

**Can Agel products help some medical conditions?**

Nutritional supplements are for supplementing the diet. They are not for diagnosing, mitigating, preventing or curing any diseases. As GelDocs, it is out of the scope of our legal abilities to diagnose or make recommendations for the treatment of any disease or diagnosed medical condition. That being said, you are probably already aware that good nutrition plays a huge role in the overall health of many lifestyle related conditions. What we have here at Agel is a way to supplement our diets to better ensure optimal nutrition.

**What are amounts of the different antioxidants, or the antioxidants families used in EXO, because they are not specified like the other products?**

There are so many different kinds of antioxidants and polyphenols in each fruit that it is very difficult to quantify how many there are and how much of each compound there is.

In many cases the whole fruit is used, in some cases only the juice is used, in a couple of cases an extract is used. As far as which antioxidants are being delivered by these fruits, it’s difficult to say.

**Why do we use Fructose to sweeten the products? Is it natural or synthetic? Why not ‘Stevia’ as a sweetener?**

Fructose is the ideal sweetener for the Agel products. It’s simple, stable, readily available, and the

sweetness suits most palates. It's also low glycemic and compatible with fruit and plant extracts because it is one. It's sweeter than sucrose on a weight/weight basis so less can be used (and so less calories) for the same level of sweetness. Most important is that fructose can be added in any amount in all regulatory territories. It is a natural product generally isolated from fruit, corn or sugar beets.

Stevia is a great sweetener but it's not an allowed ingredient in many places and can only be added up to certain limits in others. That is it's major limitation but many people also do not like the sweet taste of stevia which is a little different on the palate than sucrose or fructose which, being the most common sugars people use, are therefore well used to.

**The vitamins and minerals are “readily assimilated” and “gel technology represents a significant advance in the method of delivery” into the body — is there clinical data to back up this claim?**

The Physicians Desk Reference talks about absorption rates of tablets and capsules vs gels/liquids. As stated above, we don't have clinicals yet, but will be running them soon. The USP states that capsules must have a disintegration time of not more than 30 minutes and for tablets, not more than 45 minutes. This means that the supplement could take up to 45 minutes before your body can begin absorbing the nutrients. Our forthcoming clinical trials should only confirm data that has been generally accepted for a long time.

**“The preparation does not contain enough of the vitamins or minerals to be considered dangerous” — but does it contain enough to be effective?**

The RDI is the base level requirement to avoid deficiency symptoms of a particular nutrient, not necessarily adequate for optimum health (although that's where advice on diet would be beneficial in addition). This is somewhat of a philosophical debate. Some camps believe more is better. Our medical review board strongly feels that people over supplement. The point of a supplement is to “supplement” the diet and not replace it. So when individuals take a high level vit/min/phytonutrient supplement along with their diet, along with whatever else they are taking for their heart, immune etc that also has vitamins and minerals in it that they get more than they need and in some cases (fat soluble vitamins) more than is healthy.

**“These statements have not been evaluated by the FDA” What exactly does this mean? Are the products themselves FDA approved? Are the ingredients FDA approved?**

Dietary supplements in the USA are regulated but not approved by the FDA...here is link for dietary supplement act: <http://www.cfsan.fda.gov/~dms/dietsupp.html>.