Tahitian NONi

# FAQ



## **BIOACTIVES, IRIDOIDS, AND ADAPTOGENS**

#### Q: What is the difference between a food plant and a medicinal plant?

**A:** Food plants provide nutrients that are useful for the human body and are necessary to sustain life. Medicinal plants provide bioactives to improve health. Noni fruit has been validated by modern researchers as a medicinal plant because of the many proven bioactive compounds the fruit contains.

#### Q: What are bioactive compounds?

**A:** Bioactives are chemical compounds-such as vitamins, minerals, and electrolytes-that produce biological activity in the body.

#### Q: Does noni contain bioactive compounds?

**A:** Noni offers a broad range of unique bioactive compounds. These bioactives work together to enhance the health and function of both plant and animal systems. The most abundant bioactives in noni are iridoids.

#### Q: Do other superfruits contain bioactives?

**A:** Superfruits, like açaí and mangosteen, are food plants. The primary bioactives of regular and so-called superfruits are flavonoids and carotenoids. Unfortunately, flavonoids and carotenoids degrade rapidly when processed, when they are exposed to heat or oxygen, and when stored.

Superfruit juices touting ORAC scores, flavonoids and/or carotenoids have limited effectiveness due to product degradation and a lack of medicinal plant bioactives. The simple fact is that food plants such as açaí, mangosteen, or any of the other so-called superfruits are most bioactive when eaten fresh.

#### Q: What are iridoids?

**A:** Iridoids are powerful phytochemicals produced by plants as a self-defense mechanism. While iridoids are found in a large percentage of plants, they are not common in fruits. These dynamic compounds provide a wide range of bioactivity. They're adaptive, which means they can adapt to safely benefit the health and function of biological systems.

Iridoids have been scientifically proven to neutralize harmful free radicals, support healthy cholesterol levels within the normal range, increase energy, promote heart health, fortify the immune system, support DNA.

#### Q: Do Tahitian Noni® Bioactive Beverages contain iridoids?

- **A:** Tahitian Noni® Bioactive Beverages contain over a dozen unique nutrients classified as iridoids. These iridoids are a key component in Tahitian Noni Bioactive Beverages, tested through human clinical studies in the following areas:
  - Cardiovascular Health
  - Immune Function
  - Energy and Endurance
- Antioxidant Protection
- Joint Health

These statements have not been evaluated by the Food and Drug Administration. This product is notintended to diagnose, treat, cure, or prevent any disease.



#### INDESTRUCTIBLE IRIDOIDS

Noni iridoids are super stable and remain potent even after processing and pasteurization, which means the full power of the fruit makes it from the tree to the bottle. By contrast, the primary nutrients in ordinary and so-called superfruit juices break down during processing and lose their effectiveness.

#### Q: Are iridoids stable?

A: Iridoids are remarkably stable. Iridoids possess a simple chemical structure that makes them inherently strong in stressful environments. As a result, iridoids retain their chemical composition even when exposed to oxygen, light, and heat-activities that occur during processing and pasteurization that often degrade or break down weaker chemical compounds. The same chemical structure also means that iridoids remain stable over long periods of storage. This stability explains why iridoids retain virtually full potency from tree to the bottle and have a guaranteed shelf life of at least two years. These bioactives are not only efficacious after processing, but are highly bioavailable in the body.

#### Q: How quickly do flavonoids and carotenoids degrade?

**A:** When a consumer orders and receives a bottle of a typical superfruit juice, at least 8 months have passed since the fruit was harvested, processed, and pasteurized. The half-life of flavonoids in açaí fruit can be as short as nine days. Within two weeks of processing, as much as half of the flavonoids may no longer be active. Independent research has verified that within 6-8 months of harvest, the flavonoids in açai are completely degraded—meaning the consumer gets little or no antioxidant benefit from consuming the product. Rapid flavonoid degradation in açaí and other superfruit juices explains why there is no significant research to substantiate superfruit juice product claims.

Carotenoids include vitamin A substances, such as betacarotene. They are common in many fruits and vegetables and are a major bioactive in gac fruit. Like flavonoids, carotenoids are unstable and rapidly degrade when exposed to heat and light.

#### Q: How quickly do iridoids degrade?

**A:** The bioactive compounds in Tahitian Noni® Bioactive Beverages maintain 100% of their labeled potency for a minimum of two years in an unopened bottle. And bioactives retain their health benefits even after pasteurization. In recent testing, iridoids were found to still be active in Tahitian Noni Bioactive Beverages that were seven years past their expiration date.

#### Q: What do you mean by bioavailability?

**A:** Bio-availability describes the amount of a compound that reaches the circulatory system and is delivered to the cells. A number of factors affect the bioavailability of a substance, including stability and solubility. The more stable a compound, the better it withstands chemical breakdown when exposed to light, heat, air, storage, etc. The more soluble the compound, the more easily it dissolves in liquid. Highly soluble compounds are quickly transported by the bloodstream throughout the body, where they are more easily delivered to, and absorbed by, cells.

The primary bioactives in noni fruit, iridoids, are highly stable compounds that withstand the rigors of processing and pasteurization. Iridoids are also highly soluble, which means they dissolve easily into the bloodstream, where they can be delivered directly to cells in the body.

#### Q: What is an adaptogen?

A: An adaptogen is an agent that enhances the overall ability of the body to adapt to stress. Noni provides support against a broad range of physical, chemical, and biological stressors. It has a normalizing effect on the body that targets imbalances without affecting properly functioning systems. Noni does all this without producing toxic side effects.

#### Q: What are some of the benefits of adaptogens?

A: Tahitian Noni Bioactive Beverages set themselves apart from the superfruits of the world because they are powerful adaptogens—meaning the bioactive beverages help the body stay in balance as they work with the natural biological functions of the body.

As an adaptogen, Tahitian Noni Bioactive Beverages offer an impressive range of non-specific benefits including:

- Supports the immune system
- Protects against free radicals
- Protects DNA

- Promotes joint health
- Increases energy \$\xi\$ endurance
- Supports healthy cardiovascular system
- Supports healthy heart

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#### RESEARCH

TNI owns and operates the only noni-dedicated research laboratory in the world, led by renowned scientists from around the world.

## RESEARCH, SAFETY, AND QUALITY CONTROL

#### Q: Are there human clinical studies that prove the effectiveness of Tahitian Noni® Bioactive Beverages?

**A:** Tahitian Noni Bioactive Beverages are backed by multiple human clinical studies, and we are the only company in the industry to consistently use retail bottled product in our studies. To date, 14 separate human clinical studies have validated the remarkable health benefits of Tahitian Noni Bioactive Beverages.

Most superfruit juices rely largely on anecdotal support to justify their claims. Scientifically validated plants such as noni have the weight of legitimate, reputable research behind them. The benefits of **Morinda citrifolia** (noni) are validated by real science. Visit www.tni.com to learn more.

#### Q: Does Tahitian Noni International have its own research facility?

**A:** TNI owns and operates the only noni-dedicated research laboratory in the world, led by renowned scientists from around the world. Tahitian Noni Bioactive Beverages are the only noni beverage backed by multiple human clinical trials that prove efficacy.

#### Q: Is noni fruit safe to consume?

**A:** As far back as 1769, explorers recorded that Tahitians, as well as other cultures in the Pacific, used noni for food and medicinal purposes. The European Union Scientific Committee on Foods has declared noni and noni juice as safe, and noni has self-affirmed GRAS (Generally Recognized as Safe) status in the United States. Clinical trials have also established the safety of noni for humans. In two separate human clinical trials, test subjects were given limited to heavy amounts of noni. At the end of the trials, researchers found no toxicity or negative behavioral changes.

#### Q: How do you guarantee the quality of your products?

**A:** When it comes to quality, our products are unsurpassed. We have complete oversight of our supply chain, so production is carefully managed from tree to bottle. Fruit is harvested at optimal ripeness to ensure maximum nutritive value. Exclusive processing techniques guarantee that the potency of noni is preserved in every bottle. Throughout the production process, quality controls are used to guarantee the highest standards of quality.



#### **NEW INDUSTRY**

Just like we created the superfruit industry back in 1996, we have launched a new category of dietary supplements: bioactive beverages.

## **BIOACTIVE BEVERAGES**

#### Q: Are all superfruit juices the same?

**A:** No. Although the superfruit market has become crowded with products made from açaí, mangosteen, gac, and others the primary bioactives in these fruits are flavonoids and carotenoids. The more we've studied noni, the more we realize that it is quite different from all of the other superfruits. Noni contains 150 different bioactive compounds. Iridoids are one of the key bioactives in noni. Iridoids are highly stable bioactive compounds that produce a wide range of biological activity in the body. Other processed superfruits do not produce the same range of biological activity as noni fruit because they lack the potent blend of bioactives and stability that noni has.

#### Q: Is Tahitian Noni International creating a new bioactive beverage industry?

**A:** Yes. Just like we created the superfruit industry back in 1996, we have launched a new category of dietary supplements: bioactive beverages. These are beverages that provide proven health benefits through human clinical trials. Beverages that are stable throughout their entire shelf life—with specific benefits that can be measured, quantified, studied, and reproduced. Tahitian Noni International created the superfruit industry and we are now creating a new category of bioactive beverages.

#### Q: Is Tahitian Noni International the leader in bioactive beverages?

**A:** Tahitian Noni International is the worldwide leader in bioactive beverages. No one else has a bioactive beverage with as many proven benefits as TNI.



#### FORWARD THINKING

Many of our business practices have been green from the beginning, and we remain committed to finding new ways to reduce our carbon footprint.

## **ENVIRONMENTAL STEWARDSHIP**

#### Q: Does Tahitian Noni International exercise environmental stewardship?

**A:** Our commitment to sustainable harvesting, processing, and product distribution practices illustrates how seriously we take our environmental responsibilities. Many of our business practices have been green from the beginning, and we remain committed to finding new ways to reduce our carbon footprint.

Our noni is all-natural. No chemical or synthetic fertilizers. And once the noni fruit is ripe, only the minimum amount needed is picked by hand by highly trained French Polynesian harvesters-whose ancestors have taken care of their pristine island environment for the last 2,000 years. We are passionate about our stewardship.

#### Q: So what else are you doing to protect the environment?

**A:** Since we began business in 1996, TNI has created and cultivated innovative practices to remain clean and eco-friendly. We've reduced our carbon footprint by streamlining our business costs and shipping requirements. We've reduced our utilities expenses and usage.

#### Q: Why are you using aluminum bottles?

**A:** Aluminum is more recyclable than glass. Almost half of all aluminum cans in existence are recycled compared to less than 24% of glass bottles. Where aluminum remains a consistent hot commodity, the need for recycled glass is declining. As a result, more and more glass is finding its way into landfills—where it doesn't biodegrade.

#### Q: Are there other advantages to aluminum bottles?

**A:** Yes, aluminum bottles are lighter than glass—almost 90% lighter. That weight difference lowers the greenhouse gases generated in shipping. Aluminum is easier to ship, easier to carry, and it is much harder to break, crack, or puncture.



#### THE BULLET

The liner in the 750 ml Bullet aluminum bottle is BPA free and FDA approved.





#### THE QUAD

The bag in the Quad is made out of FDA food-grade recycled plastic, and is made out of the same material used to ship noni pulp from Tahiti.

### NEW PRODUCT PACKAGING

- Q: In the past we've said that glass is the only container that really protects our beverages, and that green glass protects from UV degradation. Are we changing our story now?
- A: We will continue to sell the glass bottles. However, technology has advanced and the 750 ml Bullet aluminum bottle and 4-liter Quad protect our beverages from light, temperature, vapor, and humidity just as well as glass bottles.

Our aluminum and cardboard packaging are made from recycled material and emit less carbon in production, distribution, and disposal. The aluminum bottle and cardboard Quad box are much less likely to break while shipping. And these new package options are significantly more recyclable than glass, have a significantly smaller carbon footprint than glass, and represent a solid waste reduction of up to 95% compared to our glass packaging.

#### Q: What are the liners in the aluminum bottle and Quad made of?

A: The liner in the 750 ml Bullet aluminum bottle is BPA free and FDA approved. The bag in the Quad is made out of FDA food-grade recycled plastic. The bag in the 4-liter Quad is made out of the same material used to ship noni pulp from Tahiti.

#### Q: How long has this liner been used in the beverage industry?

A: Over 100 years.

#### O: What does BPA stand for?

A: BPA stands for Bisphenol A. Products with high amounts of BPA have had negative health side effects in the past. The FDA currently allows consumer products to have BPA only if they have 400 times less than a harmful dose of BPA in them. Tahitian Noni Bioactive Beverage liners are completely BPA free.

#### Q: Do other brands use this liner?

**A:** Many multi-national companies have used this same liner for decades.

#### Q: Are the liner in the aluminum bottles and the bag in the Quad safe?

A: The liners used to protect our bioactive beverages in the 750 mL Bullet aluminum bottles and the 4-liter Quad are safe. These packages have been carefully reviewed by our research and development staff to ensure that they meet TNI's high standards of quality and safety. These packages have also been approved by the U.S. Food and Drug Administration for use in the beverage industry. The liner used in the 750 mL bottle is BPA free and prevents our bioactive beverages from ever coming into contact with the aluminum bottle.

#### Q: Is the liner plastic, or does it have any plastics in it?

A: The liner is an FDA-approved, plastic-grade product and is sprayed onto the bottle.

#### Q: If the bottle is dented, does it compromise the product? Will the liner break off or split and expose the beverage to the aluminum?

A: The liner will not be effected by any dents, no matter the severity. It will not fragment because it adheres to the bottle.

#### Q: Will the natural, fruit-based acidity of Tahitian Noni Bioactive Beverages compromise the liner in the bottles or bag in the Quad?

A: No. The pH level of our bioactive beverages will not degrade the liners used in the 750 mL Bullet aluminum bottles or the bag in the 4-Liter Quad over the products two-year shelf life.

#### SPOUT INSTRUCTIONS



Lay pack flat with perforated opening facing upwards. Break and lift perforated section to expose tap. Remove circular cardboard tab from perforated flap.



Inside Pack is the Spout Tap. Carefully pull the Spout Tap through the large opening.



Carefully pull tap through opening and slide into circular opening.



Push flap down behind threaded neck of tap to lock it in place.



Remove silver seal from Spout Tap. To dispense bioactive beverage stand pack upright and push the button in the center of the tap.

# Q: Can I put other beverages in the aluminum bottle, like water, when I have finished my beverage? A: Yes.

## Q: Canned fruit can develop a subtle metallic taste after it has been in a can too long. Will this happen to the bioactive beverages?

**A:** We have conducted numerous taste tests and have found that when the product is consumed as directed, and before its two-year "Best used by" date, you will experience the same fresh taste as you experience with the glass bottles and the 4-Liter Quad.

#### Q: Some bottle caps are hard to take off. Why?

**A:** We are aware of this concern. The cap we are using is called a Roll on Pilfer Proof (ROPP) cap. The cap protects the product from oxygen and is a marker of quality and freshness. In subsequent production runs, the machine we are using to tighten the caps will be adjusted to decrease the effort needed to break the seal and open the cap.

#### Q: Why do some of the bottles seem to dent easily and will that affect the safety of the product?

**A:** The 750 mL Bullet aluminum bottles are produced using a hot-fill process. When the product cools, it creates a vacuum which can make the bottle dent if it is pushed in on the sides. The bioactive beverage in a dented bottle is still safe to consume. We are making some adjustments to maintain the vacuum while reducing the possibility of denting.

#### Q: There's a bag in my box instead of four bottles. Why?

**A:** The Tahitian Noni 4-liter Quad is an easy, bag-in-box beverage dispenser. It's designed to rest on a shelf in your fridge where its spout can be easily accessed and used to pour out your desired amount. Please read the attached instructions to open the spout and begin consuming your favorite bioactive beverage.

#### Q: How do I open the box spout?

**A:** Please read the attached instructions on the bottom of the Quad box to open the spout and begin consuming your favorite bioactive beverage.





## INDIVIDUAL PRODUCTS

#### TAHITIAN NONI® FAMILY™

- Q: Why would I drink Family when it only has 15 mg of iridoids?
- A: Family™ tastes delicious and is perfect for children or adults who prefer a lighter noni taste. To get the same benefit that you would get in Original™, consume 4 ounces a day of Family to get the 30 mg of iridoids you want. Also, children, teens, and young adults do not need as many iridoids as performance athletes, adults, and the elderly.

#### TAHITIAN NONI® EXTRA™

- Q: We say that Extra is intended for those with special health concerns yet Tahitian Noni Pure has more iridoids. What's the difference between these two products?
- A: Extra™ provides the most iridoids per serving of our ready-to-drink beverages (60 mg of iridoids per 60 ml serving). Extra includes iridoids from noni, blueberry and olive leaf. Extra is the most cost effective ready-to-drink beverage we offer from a cost-per-iridoid standpoint. Pure™ is intended to be used as a concentrate. Pure includes iridoids from noni and noni leaf tea. These iridoids also have health benefits. Pure can be added to other foods and beverages to fortify them with iridoids.

## **MISCELLANEOUS**

- Q: How many iridoids are there in other TNI products such as n-Core™ and NatureBorn™?
- **A:** N-Core has 30 mg of noni and blueberry iridoids per 2 ounce serving. Any TNI product that contains noni fruit or noni leaf extract will contain iridoids.
- Q: Why is the shipping on HIRO products so expensive?
- **A:** Shipping prices for our products will be different than they used to be. We are now using a weight-based model that is less expensive over the range of products than our old shipping model.



version 1.0