

THE VASCULARITY
ROADMAP

ATHLEAN-X
ULTIMATE ARMS

THE “ROADMAP” TO MORE VASCULAR ARMS: 8 FACTORS THAT INCREASE VASCULARITY

Nothing draws attention to a pair of highly-trained guns like a bulging cephalic vein. You know the one—it’s the garden hose that runs from the hand to the shoulder, poking out on the lateral side of the biceps for the envious to admire. Creating a roadmap of vascularity across the forearm and upper arm can give the appearance of sleeve-busting muscle, without necessarily having 24-inch pythons. A big, beefy arm can be powerful and strong, but it doesn’t pack the aesthetic punch of a leaner, more sculpted, venous one.

So, how do you get more vascular? Here’s a roadmap to putting a roadmap of veins all over your arms!

Use this roadmap combined with the accompanying vascularity-boosting edition of our X-Factor meal plans to get on the road to more powerful, vascular arms! This X-Factor meal plan is no departure from our usual ATHLEAN style of eating. But this time, we’ve handpicked specific foods and nutrients that will help improve vascularity, and color-coded them on the meal plan so you can recognize them! We’ve also placed an increased emphasis on supplementation, because our ATHLEAN RX supplements contain many ingredients which are key to increasing vascularity on several fronts (more on that later!)

So without further ado, time to hit the highway!

ROUTE 1: GENETICS AND AGE

Unfortunately for some of us, the road to more vascular arms starts with genetics. Some people have naturally wide and plentiful superficial veins which are more visible between the muscle and skin. Other people may have thick skin which hides them more effectively. Skin tends to thin out as we age, which is why you always come across that grandpa in the gym doing curls with spider webs spread across his arms. Since we can’t change our genetics, let’s look at some factors that are within our control.



ROUTE 2: DECREASE BODY FAT PERCENTAGE

Gifts or curses from mom and dad aside, the best thing to do is to lower overall body fat. By thinning out the fat tissue between the muscle and skin it will be easier for the veins to pop. Again, everybody is built differently and will experience heightened vascularity at varying body fat levels, but a good benchmark to shoot for is 10%. If you have the discipline to reach single-digits, all the better. That's when veins start showing up on your abs as well.

Perhaps the most important factor in lowering body fat levels is nutrition. Our ATHLEAN X-Factor Meal Plans are specifically designed to help you pack on muscle and drop body fat simultaneously. One of the most prominent macronutrients in the plan is protein, because a high protein diet supports low body fat levels in a few ways. First, it helps build muscle tissue, which on its own increases metabolism even while you're at rest. Second, high protein diets help keep you feeling satiated and satisfied, which helps you stick to a healthy diet. Finally, eating a high protein diet will not only help you lean out, but meats, eggs, fish and nuts also contain high levels of other nutrients that improve vascularity, as we'll discuss later in this report!

Including plenty of fibrous carbs like vegetables and fruits, a moderate amount of starchy carbs like potatoes and whole grains, and some healthy fats, as outlined in the X-Factor plans, will help round out your diet, and help keep you feeling full and functioning on full-throttle!

Finally the X-Factor Meal Plans recommend eating 5-6 times per day to promote blood sugar stabilization and keep the metabolic fires stoked, to also help you in your fat shedding efforts. Outside of your three squares, shoot for 3 additional balanced snacks per day. Our ATHLEAN RX2 supplement is a great portable snack option that has the added benefit of helping you meet your daily protein needs.

Besides a no-nonsense eating plan, adding a few high-intensity endurance workouts per week (like our ATHLEAN Burst Training) not only helps your body composition, but has been shown to induce capillary density over time. (<http://www.ncbi.nlm.nih.gov/pubmed/15020701>). The repeated vasodilation that comes through this type of training can also cause veins to remain more enlarged in a resting state which will not only improve your vascularity but your blood pressure profile as well.

Lowering your body fat percentage (unlike changing your DNA) is something that you most certainly can do and will need to do if you dream of getting instantly noticeable vascular muscularity. That said, this is going to take some discipline and dedication making it perhaps a bit more of a mid to long term goal, depending on how far away from vein visibility you are at the moment. If you are on the verge however, and can already start to see the familiar blue tint of your budding new roadmap popping up beneath your skin, there are some additional short term tactics you can employ that will cause your veins to be more bulbous. Certain food choices and supplements can help make your quest not only more obtainable, but much more noticeable and accelerated.

ROUTE 3: INCREASE NIACIN INTAKE (VITAMIN B3)

Niacin opens capillaries and makes blood flow more freely right near the skin's surface. This causes the skin to warm and a temporary reddening in appearance that is commonly called a "niacin flush". An itching feeling caused by the release of histamines may also accompany the redness, but it's also harmless and short-lived.

For the niacin to really work you need to hit about 100 mg to start; overdosing will exacerbate the flush and tingling sensation. There are supplements available, but a better alternative is to tailor your diet toward foods rich in niacin.

Fish (tuna/salmon) is arguably the best protein source for niacin, followed by lean meats such as chicken and turkey. Liver, lamb and bacon are also possibilities, but must be balanced against their fat and calorie content. For fibrous carb sides look to raw crimini mushrooms, asparagus, tomatoes and bell peppers. The best starchy carbs include sweet potatoes and brown rice. Snackers will want to grab peanuts, sunflower seeds and, if you can stomach it, canned sardines (yuck). Coffee drinkers will be happy to know it's also packing some niacin along with the adrenaline jolt.

Here's a list of foods that are high in niacin. As you'll see, we've included and highlighted many of these foods in our Ultimate Arms X-Factor Meal Plan to help you recognize these niacin-boosters and include them in your daily meals.

MEATS:

Tuna
Salmon
Chicken
Turkey
Pork
Beef
Veal
Liver
Lamb
Bacon (regular or turkey)

STARCHY CARBS:

Sweet potatoes
Brown rice
Buckwheat
Wheat germ

NUTS AND SEEDS:

Peanuts
Almonds
Sunflower seeds

FIBROUS CARBS:

Mushrooms
Tomatoes
Broccoli
Asparagus
Kidney beans
Bell peppers
Yellow corn



SUPPLEMENTATION NOTES:

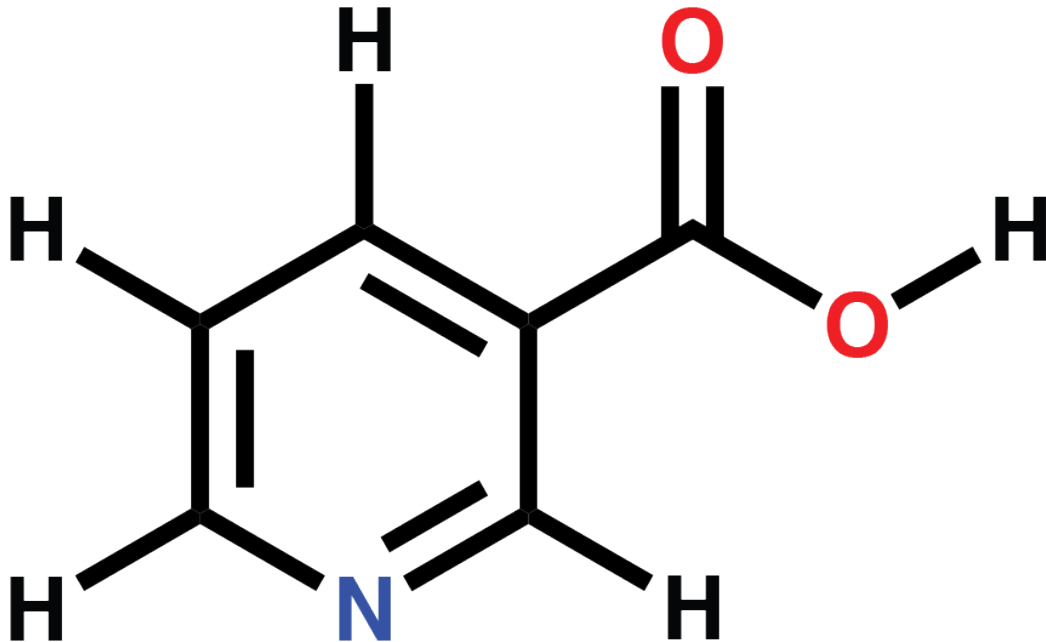
Our ATHLEAN RX X-Cite (RX1) pre-workout supplement contains niacin (vitamin B3) and Beta Alanine to help you get that flush and vasodilation in both a very direct and not so direct way, respectively.

While we've already discussed the benefits of niacin, beta alanine presents an alternative route to your roadmap! By initiating a mild histamine response, BA sets off a cascade of events that ultimately leads to temporary surfacing of your existing vascularity to the skin. Beyond that however, this popular pre-workout ingredient and beta amino acid can establish much more long term benefits by fueling high intensity muscle performance through its impact on muscle chemistry during every set of your workout!

Research now shows that lactic acid is NOT the only contributor to fatigue during exercise. Hydrogen ion accumulation is perhaps just as disabling. That said, by promoting high levels of intramuscular carnosine (a known lactic acid buffer and H⁺ ion neutralizer), Beta Alanine supplementation can significantly delay fatigue and extend muscle power output.

Over time, this leads to much more consistent intensity levels in your training...a known precursor of accelerated muscle growth. Pair that up with the solid nutritional approach within your X-Factor meal plan and you're well on your way to single-digit, ripped athletic (and vascular) muscle.

We recommend RX1 daily in our Ultimate Arms X-Factor Meal Plan, 30 minutes prior to your workout or in the a.m. if on a non-workout day.



ROUTE 4: BOOST NITRIC OXIDE

Nitric Oxide (NO) is a molecule and gas found in the body that helps relax muscles in the arterial walls to improve circulation and encourage blood flow. Vasodilators like NO are popular in pre-workout supplements because they keep blood pouring into the muscles for a more sustained pump and energy promoting oxygenation. Studies have shown that by the time men hit their 40s, they're producing roughly 50% less nitric oxide they did in their teens and 20s, making supplementation necessary if you want to really fill up those vessels (not to mention your shirt sleeves). L-arginine (an amino acid found in grains, fish and meat) agmatine (a metabolite of arginine), and citrulline malate are all popular NO boosters.

To increase NO through diet, look for foods high in nitrates. Wait...haven't we heard that nitrates aren't so good for us? Well, it's another one of those "depends on the source" type questions that needs further clarification. Most studies that have questioned the health implications of nitrates have focused on processed meats as the source. These low quality meats contain an additional host of potentially problematic additives and sickeningly high levels of sodium that may be significantly skewing the findings to reflect more of a cumulative curse than an isolated demonization of nitrates. In fact, some recent studies have actually refuted these concerns making it even more inconclusive and debatable to this day.

Regardless of what particular ingredient in deli and low quality processed meats is the root of our evils...you won't need to be concerned with it since we steer very clear of their inclusion in the X-Factor Meal Plans and opt instead for natural meats and vegetable based sources of nitrate...which brings us to that other source I mentioned earlier.

The nitrates that come out of the ground carry no risk and actually contain many cardiovascular benefits. Once consumed, the bacteria in the digestive tract immediately convert plant based nitrates to nitrites, which eventually become nitric oxide in the blood. Spinach, leafy greens, beets and other root vegetables—they suck nitrates up from the soil—are the most abundant sources.

HERE'S A LIST OF HEALTHY FOODS THAT ARE NATURALLY HIGH IN NITRATES:

VEGETABLES:

Arugula
Celery
Lettuce
Beets
Spinach
Watercress
Endive
Fennel
Leek
Celeriac
Broccoli
Cabbage
Kale
Cucumber
String beans
Radishes
Pumpkin

FRUITS:

Watermelon
Strawberries
Melons
Raspberries
Cherries
Bananas
Raisins
Prunes
Figs

TREATS:

Chocolate/cocoa

Foods that naturally contain arginine also help to boost NO. As you'll note there is some overlap with foods high in nitrates:

MEATS:

All meats (choose high quality, non-processed)
All seafood
Egg yolks

NUTS, SEEDS AND BEANS:

Lentils
Peas
Peanuts
Sunflower seeds
Kidney beans
Peanut butter
Almonds
Cashews
Pistachios
Walnuts
Lima beans
Soybean

FIBROUS CARBS:

Spinach
Seaweed
Chives
Onion
Shallot
Peppers
Leeks
Garlic
Mushroom
Avocado
Grapefruit
Kiwi
Watermelon
Grapes
Strawberry

STARCHY CARBS:

Whole grain wheat

TREATS:

Chocolate

SUPPLEMENTATION NOTES :

Arginine is another superstar supplement when it comes to improving vascularity. Not only does it produce nitric oxide, it also enhances fat metabolism and helps regulate salt levels in the body. Outside of its vascularity benefits, it also helps release growth hormone and rid the body of free radicals. Once again, ATHLEAN RX1 X-Cite steps in and contributes over 3,000mg of arginine because of this wide variety of benefits. In its AAKG form (arginine-alpha-ketogluterate), acts as a precursor to NO that also increases oxygen flow to the muscles to produce more immediate energy during activity. In the long term, this positive oxygen flow produces a more anabolic environment for muscle growth and fat metabolism.



ROUTE 5: SUPPLEMENT WITH CREATINE

Creatine is a triple-threat in the vascularity game. First off, supplementing with it has been proven to increase muscle mass by promoting stronger and longer muscle contractions. Larger muscles push blood vessels closer to the surface for a more vascular appearance. Secondly, creatine is also a mild vasodilator, which encourages blood to flow through those veins and make them really pop. In fact, one of the first signs reported by those that take creatine is the noted muscle fullness and vascularity (if lean enough) within just days of taking the first dose. Finally, while creatine does encourage water retention, which in normal circumstances would not be optimal for vascularity (see below), it actually promotes a different kind! Creatine induced retention is intracellular (meaning within the muscle cell) rather than subcutaneous or interstitial (occurring outside the cell) again, leading to much more fullness (giving the appearance of bloat-free size) and muscle hydration (setting the stage for more long term growth).

While creatine can be found in raw meat and fish, you'd have to eat in excess of 800g of these proteins per day to ingest the optimal amount of creatine to reap its benefits. Since this is not realistic, using supplements that contain creatine is the best approach.

SUPPLEMENTATION NOTES :

In addition to its 25g of protein per serving and our BCAA matrix, our ATHLEAN XLR8 (RX2) post-workout supplement contains creatine in its buffered form (Kre-Alkalyln) to promote greater utilization and absorption with less waste byproduct (creatinine) than is seen with traditional creatine monohydrate. The improved bioavailability of alkaline (non-acidic) creatine allows for smaller doses to be taken to achieve the results you are looking for from the supplement. Finally, aside from creatine's vascularity boosting benefits, it increases muscle power output to fuel intense workouts and stimulate muscle growth, making it an important supplement for anyone looking to build muscle, improve performance or reach aesthetic goals.

ROUTE 6: FIRE UP WITH THERMOGENIC FOODS

The warmer your body temperature is, the more blood is drawn to the surface to be cooled...it's our bodies internal thermostat at work! When you're cold, blood flows inward to heat the organs. That's why you tend to look more vascular in the summer than the winter. Working out and playing sports produce this blood-heating effect. You can also get it by eating certain "thermogenic" foods. Aside from this effect, thermogenic foods can spur the metabolism by as much as 20% by simply requiring a greater effort and energy expenditure by the body to process them, which helps decrease overall body fat in the long term, thereby increasing that vascular look.

Thermogenic foods include those with capsaicin (like spicy peppers), ginger (which contains two thermogenic compounds (gingerol and shogaol), coconut oil (whose MCT fatty acids are thermogenic), green tea (its catechins and caffeine give it thermogenic properties) and several others. Finally, a diet high in protein like the Ultimate Arms X-Factor Meal Plan, can create diet-induced thermogenesis.

<http://www.ncbi.nlm.nih.gov/pubmed/15466943>



FOODS THAT HAVE THERMOGENIC PROPERTIES INCLUDE:

Hot peppers
Cayenne pepper
Black pepper
Cumin
Turmeric
Horseradish
Wasabi

Garlic
Ginger
Mustard
Cinnamon
Cardamom
Cloves
Green Tea
Coconut/MCT Oil
Caffeine

SUPPLEMENTATION NOTES:

Our X-Cite (RX1) pre-workout supplement contains Green Tea extract and caffeine (in both anhydrous and naturally occurring guarana form) which will help thermogenically elevate your metabolism. Reconstruxion (RX3), our muscle recovery supplement, contains thermogenic MCT oils that will help you to continue to oxidize fat for muscle repair, even while you sleep. Finally, in addition to their own thermogenic benefits as we discussed earlier, the proteins provided in both RX2 and RX3 allow you to ensure you're getting adequate protein intake to supplement your hard training and muscle building efforts by providing you with 25g and 20g of protein per serving respectively.

ROUTE 7: AVOID WATER RETENTION

Subcutaneous water retention (also called extracellular hydration in science-speak) hides vascularity. It can occur for a variety of reasons including high salt intake, but the main culprit is usually not drinking enough liquid, believe it or not. Instead of excreting it, the body panics and stores water for reuse for its various functions. The result is a puffy, bloated appearance. While it might seem counterintuitive, drinking more water and achieving high levels of hydration acts as a flushing mechanism to eliminate the water between muscle and skin. It also makes for an improved skin tone and tighter look, which enhances vascularity.

Aim to drink 12 to 24 ounces of water immediately upon waking as a great way to kick start your hydration. Keep a bottle/cup/etc near your sink as a constant reminder so you don't forget this critical opportunity to break your water fast from before you went to bed...however many hours ago that was. From there, keep the water coming throughout the day. As a simple rule of thumb, if you are sticking to the X-Factor recommendation to eat 5-6 times per day, you'll want to include a glass at each of those meals. Drink one glass between each of the meals as well, and you are on your way to nailing down the hydration needed to keep those muscles (and those vessels) full and flowing!

Next, anything that helps pull water away from the skin and into the cell (intracellular hydration) will decrease bloating, make you look stronger and help create a more vascular appearance. This is one reason we insist on including high quality, low glycemic starchy carbohydrates in the X-Factor Nutrition plans. Carbs are critical for not only maintaining total body hydration levels as they help pull water away from the skin into the cell, but also for general energy maintenance as the brain's and muscles preferred source for fuel. That said, more is not necessarily better! If you overdo the carbs, that extra hydration will start to look pretty bloated and puffy, and you will lose the vascularity benefits. For this reason, in the X-Factor Meal Plans we recommend eating twice as much fibrous carbohydrates as starchy carbohydrates for any given meal.

SUPPLEMENTATION NOTES:

Buffered creatine is an intracellular hydrator, so it also helps pull water away from the subcutaneous space and into the cell to give you a more vascular and non-puffy appearance... more reason for you to consider the advantage of the Kre-Alkalyn found in our ATHLEAN XLR8 (RX2) .

ROUTE 8: TEMPORARY TECHNIQUES/TRICKS OF THE TRADE

We're not bodybuilders at Team Athlean, but we're still willing to acknowledge some of their "techniques" for achieving vascularity. These aren't necessarily recommended, but can be effective.

Even though we've just outlined how important increasing blood flow is to increasing vascularity, there's anecdotal evidence that blood flow restriction (occlusion) training is quite promising at producing huge muscular pumps. By cuffing the upper arm—almost like putting a light tourniquet on your muscle—it forces the blood to pool inside it during exercise, causing great swelling. The resulting low oxygen and high lactic acid levels can increase the recruitment of fast-twitch fibers and protein synthesis. We can't vouch for the safety or effectiveness, but this style of training has its proponents.

Before a competition, bodybuilders will significantly cut down on carbs and sodium, which can draw water from the muscle and skin. Then, right before a show when they want their veins to explode, they eat a very high-carb meal which causes the cells to swell and muscles to become especially vascular.

Along those same lines, some fitness models ingest glycerol before photoshoots, which has been reported to increase concentration of fluids in cells (hyperhydration), creating fuller muscles with greater striations. They've also been known to wash it down with a little red wine which is a vasodilator and adds to the vascularity.

Finally, a warm epsom salt bath can remove subcutaneous water from the body. It's very temporary, but can improve vascularity before a day at the beach.

There's no need to think that genetics is the only factor, or that you only have access to temporary tricks to get those veins to pop. There are several foods, spices and supplements that can help you get that roadmap you're after. And the more healthy vein-swelling foods and supplements you employ, the better your results!

To get the benefits of all the best nutrients for vascularity in an easy-to-digest way, simply follow your Ultimate Arms X-Factor Meal Plan. It contains a day-by-day plan for maximizing your intake of niacin, NO boosters and thermogenic foods, and tells you exactly which supplements to take and when to take them to get you that winding web of veins you're looking for. Use this guide, your Meal Plan and your Ultimate Arms workouts to get your biggest, strongest, most vascular arms ever!