

Everyone is talking about SystolMax, but what are the benefits and who is it for?

SystolMax was formulated with the intention of **supporting healthy blood pressure** in ‘larger’, possibly **assisted individuals**, more likely struggling with **hypertension**. Hypertension is the name given to **high blood pressure**, a condition often resulting from poor lifestyle choices such as unhealthy food, lack of exercise and excessive alcohol. High blood pressure is when the force of the blood pushing against the arterial walls is consistently too high. It may result from other medical conditions as well, such as obesity, high cholesterol, high sodium and or a low potassium diet, insulin resistance and metabolic syndrome, chronic stress, and aging. Left untreated, high blood pressure can lead to further health problems including eye damage, **stroke**, **vascular dementia**, kidney disease, **cardiovascular disease** (heart attack) and **heart failure**.

High blood pressure is unofficially termed the ‘**silent killer**’. There may be **NO signs or symptoms**. You should get your blood pressure checked! Broadly speaking, a systolic and diastolic blood pressure of <120 and <80 mmHg is considered optimal.

The blood pressure reading consists of two measurements: **systolic pressure**, produced by the left ventricle contracting to pump the blood around your body, and **diastolic pressure**, the resistance to the blood flow in the blood vessels when the heart rests between beats.

There are blood pressure lowering drugs of course, and a chat with your GP may be helpful. Some assisted users have traditionally self-prescribed ramipril, something we’d strongly advise against as it should not be self-prescribed and needs to be monitored to avoid unwanted side effects including **kidney damage**.

Along with modifications to your **diet** and **exercise**, stress reduction behaviours such as sleep, yoga, meditation, guided breathing, and cold exposure may be useful.

Additionally, **SystolMax**, a product formulated from **natural ingredients** might be beneficial to your daily supplement regime.

DASH diet (Dietary Approaches to Stop Hypertension) doi: [10.1001/jama.2017.1628](https://doi.org/10.1001/jama.2017.1628).

There are multiple factors that can increase your risk of high blood pressure.

- Family history.
- Lifestyle: High salt +/- low potassium, excessive alcohol intake, smoking, lack of exercise.
- Weight: body fat and obesity significantly increase the risk of hypertension.
- Race/ ethnicity: Dark skin adults experience high blood pressure more frequently.
- Gender: Male under 55, female after menopause.
- Age: Blood pressure tends to increase with age.
- **Performance enhancing drugs.**



“SystolMax has a simple yet well-dosed panel”

Using ½ to a 1 scoop a day will be adequate for most and give you **45 servings** from a tub.

What does SystolMax contain?

L-Citrulline 6 g

Research suggests chronic supplementation with citrulline effectively reduces blood pressure and improves blood flow, particularly in individuals with hypertension or other cardiovascular problems.

L-Citrulline or citrulline (not citrulline-malate) is a non-essential amino acid found in **watermelon** (*citrullus vulgaris*), legumes, meats, and nuts. it plays a key role increasing plasma **arginine** and enhances the bioavailability of **nitric oxide**. Citrulline has a unique metabolism and is not used by the intestine or taken up by the liver (splanchnic area), so is better able to deliver nitrogen to the body for many uses.

Citrulline is produced naturally in the body, the product of arginine-mediated nitric oxide production. However, regular long-term supplementation increases typical amounts, which has beneficial effects on health and exercise performance: improving vascular **endothelial** function and integrity, including vascular tone, thereby regulating **blood flow**.

Chronic citrulline supplementation has been found to be anti-hypertensive in obese adults with prehypertension or hypertension, **reducing blood pressure** and vascular stiffness and increasing peripheral blood flow.

Doi: [10.1097/MCO.0000000000000340](https://doi.org/10.1097/MCO.0000000000000340).

Doi: [10.1007/s00421-016-3418-7](https://doi.org/10.1007/s00421-016-3418-7).

Doi: [10.1038/ajh.2012.20](https://doi.org/10.1038/ajh.2012.20).

Doi: [10.1097/MCO.0000000000000340](https://doi.org/10.1097/MCO.0000000000000340).

Doi: [10.1152/jappphysiol.00192.2014](https://doi.org/10.1152/jappphysiol.00192.2014).

Further benefits of citrulline

- improves oxygen uptake in high-intensity exercise performance
- decreases arterial stiffness independent of blood pressure reduction
- achieves nitrogen homeostasis
- reduces arterial stiffness by improving endothelial function and vascular tone
- reduces cardiovascular disease
- atheroprotective against progression of atherosclerosis by endothelial-dependent vasorelaxation
- antioxidant offering protective effects against lipid oxidation
- regulator of immunity
- improves erectile hardness in men with mild erectile dysfunction
- preserves protein synthesis in myotubes in catabolic conditions
- may increase nitrogen availability to preserve muscle protein synthesis in the elderly

Doi: [10.1152/ajpendo.00398.2005](https://doi.org/10.1152/ajpendo.00398.2005).

Doi: [10.1016/j.urology.2010.08.028](https://doi.org/10.1016/j.urology.2010.08.028).

Doi: [10.1016/j.ijcard.2010.10.004](https://doi.org/10.1016/j.ijcard.2010.10.004).

Doi: [10.1007/s00726-015-1932-2](https://doi.org/10.1007/s00726-015-1932-2).

Doi: [10.1152/jappphysiol.00192.2014](https://doi.org/10.1152/jappphysiol.00192.2014).

Doi: [10.1186/s12970-016-0117-z](https://doi.org/10.1186/s12970-016-0117-z).

Beta Vulgaris (Beetroot) 2 g

Beta Vulgaris, more commonly known as **beetroot** is high in **nitrate**, it gives SystolMax its **pink colour** and ‘beetrooty’ overtone. It is a **nutraceutical** and has potential as a health promoting and disease preventing food. Like citrulline, beta vulgaris is important in enhancing nitric oxide bioavailability, however it is active via the **nitrate-nitrite-nitric oxide** pathway.

Nitric oxide is in other vegetables such as rocket, **leafy greens** but the amount we consume is unknown and there is a minimum amount required to produce an effect.

The ability of beta vulgaris to increase plasma nitrate and therefore nitric oxide, means it has been extensively studied for hypertension and endothelial function. It is rich in **polyphenols**, plant chemicals, which have therapeutic effects on **reducing oxidative stress** and **chronic inflammation**. These **betalain pigments** work synergistically with the nitric oxide in **reducing blood pressure** and vascular stiffness and **increasing peripheral and cerebral blood flow**.

Doi: [10.3390/nu7042801](https://doi.org/10.3390/nu7042801).

Doi: [10.3389/fnut.2022.823039](https://doi.org/10.3389/fnut.2022.823039).

Doi: [10.1016/j.niox.2014.03.162](https://doi.org/10.1016/j.niox.2014.03.162).

Doi: [10.1017/S0954422413000188](https://doi.org/10.1017/S0954422413000188).

Further benefits of beta vulgaris

- improves oxygen uptake in high-intensity exercise performance
- improves calcium handling in the sarcoplasmic reticulum
- upregulates nitrogen oxide synthase
- reduces cognitive decline
- improves reaction time in individuals with type 2 diabetes
- reduces arterial stiffness by improving endothelial function and vascular tone
- reduces cardiovascular disease and platelet aggregation
- improvements in recovery of left ventricular function following ischemic attack
- atheroprotective against progression of atherosclerosis by endothelial-dependent vasorelaxation
- antioxidant offering protective effects against lipid oxidation
- regulator of immunity
- improves erectile hardness in men with mild erectile dysfunction
- gastro-protective; enhanced mucosal protection against NSAIDs

Doi: [10.1161/HYPERTENSIONAHA.107.103523](https://doi.org/10.1161/HYPERTENSIONAHA.107.103523).

Doi: [10.1056/NEJMc062800](https://doi.org/10.1056/NEJMc062800).

Doi: [10.1152/jappphysiol.01070.2010](https://doi.org/10.1152/jappphysiol.01070.2010).

Doi: [10.1073/pnas.0402927101](https://doi.org/10.1073/pnas.0402927101).

Doi: [10.1152/jappphysiol.00046.2010](https://doi.org/10.1152/jappphysiol.00046.2010).

Doi: [10.1016/j.freeradbiomed.2009.01.011](https://doi.org/10.1016/j.freeradbiomed.2009.01.011).

Doi: [10.1016/j.niox.2014.05.003](https://doi.org/10.1016/j.niox.2014.05.003).

Doi: [10.1002/mnfr.201400484](https://doi.org/10.1002/mnfr.201400484).

Inulin 1.35 g

Inulin is a **prebiotic**. A **soluble fibre** found abundantly in **artichokes** and chicory root. It is a member of the fructan family of plant fibres which are also found in asparagus, onions, garlic, leeks, and bananas. Inulin dissolves in water or in the stomach and forms a gelatinous substance which can **slow digestion** and reduce fat absorption in the digestive tract. Prebiotic fibres also have health enhancing effects on **the gut microbiome** which influence the metabolism of carbohydrates and lipids, directly associated with the increased risks of hypertension.

Inulin is a highly fermentable fibre and supports the number of good Bifidobacteria and Lactobacilli. These colonic microflorae produce **short chain fatty acids** (SCFA) as a by-product of this fermentation which are metabolised in the liver, reducing fatty acid and cholesterol synthesis.

Inulin helps slow the digestion of carbohydrates, promoting healthy blood sugar levels by enhancing insulin sensitivity and improving endothelial function, beneficial in the treatment of prediabetes and **hypertension**. There is evidence from the DASH trial that this type of fibre may improve mineral absorption which can also have a **healthy effect on blood pressure**.

Doi: [10.1159/000441626](https://doi.org/10.1159/000441626).

Doi: [10.1586/17434440.3.5.595](https://doi.org/10.1586/17434440.3.5.595).

Doi: [10.1001/archinte.167.9.956](https://doi.org/10.1001/archinte.167.9.956).

Doi: [10.1056/NEJM199704173361601](https://doi.org/10.1056/NEJM199704173361601).

White Willow Bark (100 mg)

White willow bark (*Salix alba*) is the bark from the branches of the white willow tree and is fondly named '**nature's aspirin**'. It has been used historically in the treatment of pain, as an anti-inflammatory and antipyretic. White willow bark contains salicin, polyphenols and flavonoids which in combination exert therapeutic actions.

White willow bark **does not damage the gastrointestinal mucosa** like NSAIDs and aspirin and an extract dose with 240 mg salicin was found to have no major impact on blood clotting. **It is not advised to be taken in people with aspirin allergy**.

Doi: [10.1002/ptr.3386](https://doi.org/10.1002/ptr.3386).

Doi: [10.1002/ptr.5377](https://doi.org/10.1002/ptr.5377).

Lycopene 50 mg

Lycopene is an antioxidant. It is a carotenoid that accumulates in the skin of fruits and vegetables giving them their red or pink colour. It is known for its concentrations in tomatoes but is also abundant in red and pink grapefruit, apricots, and watermelon too.

Lycopene exerts antihypertensive effects by reducing oxidative stress and increasing nitric oxide availability. It has been shown to mildly reduce blood pressure in normotensive individuals but has pronounced effects when blood pressure is high.

Doi: [10.1016/j.eujim.2017.07.002](https://doi.org/10.1016/j.eujim.2017.07.002).

Doi: [10.1080/10408398.2011.623799](https://doi.org/10.1080/10408398.2011.623799).

Doi: [10.3390/nu5093696](https://doi.org/10.3390/nu5093696).

Doi: [10.3389/fphar.2018.00521](https://doi.org/10.3389/fphar.2018.00521).

Doi: [10.1016/j.phymed.2021.153512](https://doi.org/10.1016/j.phymed.2021.153512).

Further benefits of lycopene

- reduces cardiovascular disease
- anti-atherosclerotic
- anti-platelet
- antioxidant offering protective effects against lipid oxidation
- reduces arterial stiffness by improving endothelial function and vascular tone
- antioxidant and prevents mitochondrial oxidative stress
- anti-inflammatory and neuroprotective
- improves metabolic profile
- inhibition of cholesterol-genesis
- the only carotenoid able to reduce atherosclerotic risk in current and former smokers in the ROTTERDAM STUDY
- reduces macular degeneration

Doi: [10.1016/S0021-9150\(99\)00221-x](https://doi.org/10.1016/S0021-9150(99)00221-x).

Doi: [10.1016/j.jnutbio.2010.02.003](https://doi.org/10.1016/j.jnutbio.2010.02.003).

Doi: [10.1016/j.nutres.2016.01.003](https://doi.org/10.1016/j.nutres.2016.01.003).

Doi: [10.1177/153537020222701013](https://doi.org/10.1177/153537020222701013).

Doi: [10.1271/bbb.70402](https://doi.org/10.1271/bbb.70402).

Doi: [10.1016/j.atherosclerosis.2009.08.008](https://doi.org/10.1016/j.atherosclerosis.2009.08.008).

Doi: [10.1016/s0899-9007\(03\)00140-0](https://doi.org/10.1016/s0899-9007(03)00140-0).

Doi: [10.1016/j.neulet.2015.10.009](https://doi.org/10.1016/j.neulet.2015.10.009).

Doi: [10.1007/s11064-016-1837-9](https://doi.org/10.1007/s11064-016-1837-9).

Magnesium citrate 50 mg

Magnesium is an **essential dietary mineral** involved in many processes within the body and plays a critical role in **blood pressure regulation**. **Magnesium deficiency** or **hypomagnesemia** leads to high blood pressure. It has numerous effects modulating endothelial function, reducing vascular tone and reactivity and through stimulating prostaglandin secretion and nitric oxide release, both exerting **vasodilatory** effects. Low magnesium increases peripheral vascular resistance by reacting with calcium.

However, in this case (50 mg) Rick has included it to prevent product clumping, but as you see, it won't do any harm either!

Doi: [10.3945/ajcn.117.155291](https://doi.org/10.3945/ajcn.117.155291).

Doi: [10.1161/hypertensionaha.116.07664](https://doi.org/10.1161/hypertensionaha.116.07664).

Doi: [10.1016/j.freeradbiomed.2006.04.008](https://doi.org/10.1016/j.freeradbiomed.2006.04.008).

Doi: [10.1038/ejcn.2012.4](https://doi.org/10.1038/ejcn.2012.4).

Doi: [10.1111/j.1365-2796.1994.tb01282.x](https://doi.org/10.1111/j.1365-2796.1994.tb01282.x).

Doi: [10.3390/nu13010139](https://doi.org/10.3390/nu13010139).

SystolMax best use tips:

Strom's SystolMax is a well dosed formulation, and we suggest trying the product at ½ to 1 scoop a day. This serving size will be enough for most people. Unless you're REALLY BIG, like Josh Maley, then you may need a little more!

SystolMax is effective don't ignore your blood pressure!

Hypertension is a complex condition in which various mechanisms combine. SystolMax contains ingredients which work synergistically to support the body, reducing the effects of high blood pressure which commonly result in cardiovascular and cerebrovascular complications.

#Neversettle for raised blood pressure.

The natural ingredients in SYSTOLMAX have a wide range of additional health benefits unlike traditional blood pressure medication.

To LEARN more about STROM or for more information on their products go to STROMSPORTS.COM or visit their YOUTUBE or STROMUCATION.COM education site.

If you have any further questions, please don't hesitate to ask!