

Product Catalogue Circulatory System

The circulatory system consists of the heart, blood vessels and the blood itself. The heart and vessels transport blood around your body, maintaining a delicate equilibrium which is critical to life.

Your heart beats ~100,000 times a day, and about 2.5 billion times in an average lifetime. Every day, it pumps 5 litres of blood through over 90,000 kilometres of blood vessels, repeatedly.

The blood cells in your circulatory system are specialised, carrying out various critical functions in the body. Red blood cells are responsible for delivering oxygen to your tissues and removing waste. Waste is removed through skin (sweat), lungs (breath), digestive system (faeces), renal system (urine).

Your circulatory system is intrinsically connected to your immune system. White blood cells are delivered to areas of the body where they help to eliminate foreign bodies such as bacteria, viruses and parasites. They also play a critical role in ingesting and removing dead cells and debris from your body.

Your circulatory system also transports platelets, which are responsible for the clotting of blood when you cut yourself. Finally, the blood also contains plasma carrying salt, water, enzymes, nutrients, hormones and proteins to the parts of your body that need it.

Cir¹ Flow

Cir¹ has been formulated to support the integrity and healthy function of blood vessels as we age.

Your blood vessels form part of your circulatory system and are responsible for ensuring healthy blood flow around your entire body. The vessels contain blood which carries oxygen, removes waste, delivers nutrients, and plays an important role in healing, immunity and the health of your organs.

The vascular endothelium is the largest organ in the body, forming an interface between the bloodstream and the blood vessel wall. However, research shows that glycocalyx thickness significantly reduces between the ages of 30 and 60 years.

Cumulating evidence suggests that a healthy glycocalyx protects the vessels, whereas disruption of the glycocalyx increases the risks of inflammation and fatty plaque formation.

The production of nitric oxide, a powerful vasodilator, also declines with age.

- **Supports healthy blood pressure and circulation**
- **Supports healthy blood vessel structure and integrity**
- **Supports the synthesis of nitric oxide for relaxing blood vessels**
- **Supports the natural regeneration of the protective blood vessel lining (glycocalyx)**



S
C
I
E
N
C
E

R
E
S
E
A
R
C
H

W
E
L
L
N
E
S

Cir¹

Circulatory System Flow

Rhamnan sulphate
Vitamin K2
Curcuminoids

Supports the integrity of the blood vessel lining and normal nitric oxide levels for circulatory health as you age.

60 delayed release vege capsules
DIETARY SUPPLEMENT

“Vascular health is intrinsically connected with health and lifespan. Rhamnan sulphate supports vascular health, especially a normal inflammatory response in which the glycocalyx plays an important role.”

Ingredient Scientist

Dr. Masahiro Terasawa

PhD, MSc – Osaka University Department of Biological Science

Dr. Masahiro Terasawa has over 25 years' experience specialising in Molecular Biology. His recent research is largely focused on the potential for Rhamnan Sulphate to support digestive, immune and vascular health. He has published 4 papers on the ability of this ingredient to support blood vessel health in the body.



Ingredient highlights

- Rhamnan sulphate is extracted from the fibre of a green seaweed called *Monostroma nitidum*, using a proprietary processing technology. It protects and restores the “non-stick” lining of arteries called the endothelial glycocalyx.
- Curcuminoids as HydroCurc® - is the world’s most bioavailable curcumin in a single dose. It reduces inflammation and oxidative stress in the endothelium and supports arterial dilation, by boosting nitric oxide levels and nitric oxide synthase activity – the enzyme that makes nitric oxide.
- HydroCurc® is the most bioavailable form of curcuminoids in the market.
- L-Citrulline is a highly bioavailable precursor to a key amino acid arginine.
- L-Citrulline supports arterial dilation by naturally boosting nitric oxide levels. This ingredient is converted to L-arginine in the body, which is then used in the synthesis of nitric oxide (NO) by means of the enzyme nitric oxide synthase. While L-arginine is the precursor for the synthesis of NO, oral L-arginine supplementation is largely ineffective at increasing NO synthesis and/or bioavailability for a variety of reasons especially in aged population.”
- Vitamin K2 and Vitamin D3 (as cholecalciferol) work synergistically to reduce vessel calcification and stiffness.
- Vitamin K2 is a fat-soluble vitamin that serves as an essential cofactor in the activation of Matrix Gla protein (MGP) in the vascular smooth muscle cell, with Vitamin K deficiency resulting in impaired MGP carboxylation and, subsequently, an increased calcification effect.

Rhamnan sulphate

is a sulphated polysaccharide from a type of green seaweed, that is extracted using proprietary technology. Rhamnan sulphate supports the maintenance and restoration of the glycocalyx.

It does this by supporting the synthesis and coverage of a major glycocalyx component called heparan sulphate, which plays a key role in protecting the endothelium.

Hero ingredients

L-citrulline

is an amino acid which supports vasodilation in the circulatory system through the creation of nitric oxide. Nitric Oxide plays a key role in arterial dilation and consequently normal blood pressure management.

Vitamin K2

Cir¹ contains K2-MK-7, which has superior bioavailability compared to other forms of K2. K2 is prevalent in fermented foods which are rare in the Western diet. In the circulatory system K2-MK-7 supports vessel flexibility, cardiac output and normal calcification levels.





Key selling points

- Unique formula containing researched ingredients to support the integrity of your vessel lining for overall blood vessel health
- Specifically targets the maintenance and regeneration of the endothelial glycocalyx, the blood vessel lining
- Cir1 Supports:
 - Blood vessel structure and integrity
 - Blood vessel flexibility
 - Normal blood pressure and circulation
 - Healthy nitric oxide levels, for a normal vasodilatory response to support cardiovascular and neurovascular health.
 - Healthy circulation for normal organ and peripheral tissue health.
- The formula includes MK-7, a form of vitamin K2 with greater bioavailability.

Formulated for customers

- Experiencing cold hands and feet, varicose veins, erectile dysfunction or cardiovascular disease
- Showing early signs of neurovascular or cardiovascular decline.
- Who wish to improve or maintain:
 - Blood vessel structure and integrity
 - Healthy blood flow to support organ health (brain, kidney, peripheral tissue)
- Recovering from mild heart failure or a heart attack
- Looking for preventative anti-aging care targeting cardiovascular health

Supplement facts

Serving size: 2 capsules | Servings per container: 30

	Per serve	% Daily Value
Green seaweed	125mg	†
<i>Monostroma nitidum</i> extract (70% rhamnan sulphate)		
L-citrulline	400mg	†
HydroCurc®	108mg	†
<i>Curcuma longa</i> extract (rhizome) (85% curcuminoids)		
Vitamin K2 (as MK-7)	180mcg	150%
Vitamin D3 (as cholecalciferol)	25mcg	125%

†Daily Value not established.

Other ingredients: Microcrystalline cellulose, Magnesium stearate, Colloidal silicon dioxide, Delayed release HPMC vege capsules.

HydroCurc® is a trademark of Pharmako Biotechnologies Pty Ltd

Find out more

SRW Laboratories Ltd, PO Box 9748, Newmarket, Auckland 1149
0800 779 522 | orders@srw.co | www.srw.co