

# Proper use of PreCardix®

## Bioactive marine peptides

PreCardix® is a safe and effective natural product for healthy blood pressure and cardiovascular health. A therapeutic dose of PreCardix® contains 1200 mg of unique bioactive marine peptides (small fragments of protein) derived from cold-water shrimp shells (*Pandalus borealis*). These peptides have been found in peer-reviewed clinical trials to have a statistically significant effect on blood pressure health. Healthy blood pressure is an important factor for longevity, and maintaining healthy blood pressure levels reduces the risk of developing blood pressure-related conditions.

Health Canada approves PreCardix® as a safe and effective natural product for healthy blood pressure and cardiovascular health. The Food and Drug Administration (FDA) and the European Food Safety Authority (EFSA) also approve PreCardix®. PreCardix® is an innovation of Marealis, a certified B Corporation.

Certified



Corporation



## Clinically Proven to Support Healthy Blood Pressure

PreCardix® bioactive marine peptides were studied in people with mild to moderately elevated blood pressure. When taken as directed each day, 1200 mg of PreCardix® has a clinically proven and statistically significant effect on blood pressure health.

The clinical trial, published in the International Journal of Hypertension, found that 89% of adults with mild to moderately elevated blood pressure experienced improvement within eight weeks or less.

## Directions and Dose

Adults: Take two (2) tablets (1200 mg) together daily before noon, a few hours before or after other medications, natural health products, or food.

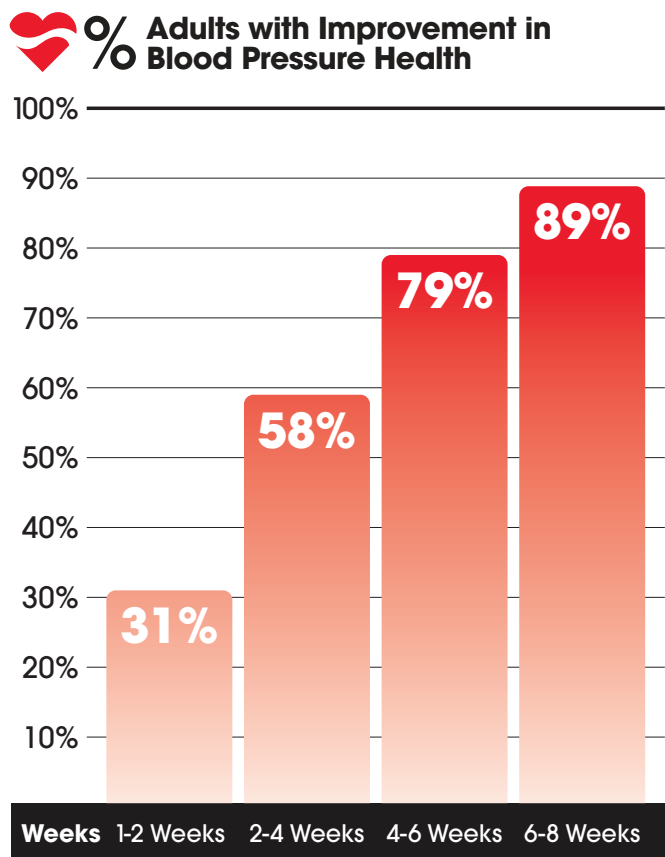
Allow 8 weeks to achieve results and continue to take daily to maintain results.

Consult with your health care provider before making changes to your blood pressure management plan.

## Understanding Blood Pressure

When blood pressure is measured, two values are recorded; systolic blood pressure (SBP) and diastolic blood pressure (DBP). For example, 120/80 mmHg. The first number represents systolic blood pressure; the maximum force blood exerts against blood vessels. This number tells you the pressure in the blood vessels when the heart is beating. The second number is diastolic blood pressure; the lowest force blood exerts against blood vessels. This number tells you the pressure in the arteries when the heart is relaxing between beats.

## Results over time



\*Marealis 13TBHM. Full scale, randomized, double blind, placebo-controlled multi-centred study.

## PreCardix® Effectiveness

The effect of PreCardix® on blood pressure observed in study participants was up to 38 mmHg in systolic blood pressure and up to 28.7 mmHg in diastolic blood pressure compared to individual baselines (blood pressure results per participant at the start of the study). Compared to baseline, the average improvement in blood pressure was 6.7 mmHg in systolic blood pressure and 1.7 mmHg in diastolic blood pressure within 8 weeks<sup>1</sup>.

The speed of effectiveness also varied by the individual during the clinical trial. 31% of adults experienced significant effects after two weeks, and 89% experienced significant effects by eight weeks.

1 Musa-Veloso K, Paulionis L, Pelipyagina T, Evans M. A Randomized, Double-Blind, Placebo-Controlled, Multicentre Trial of the Effects of a Shrimp Protein Hydrolysate on Blood Pressure. *Int J Hypertens*. 2019;2019:2345042. Published 2019 Aug 5. doi:10.1155/2019/2345042. Ref. table 4

## How does PreCardix® work?

PreCardix® bioactive marine peptides have a clinically documented ACE inhibiting action. ACE inhibitors affect blood pressure by preventing ACE (angiotensin-converting enzyme) from converting angiotensin I to angiotensin II. Angiotensin II increases blood pressure in several ways, including stimulating sodium and fluid retention and constricting blood vessels. Inhibiting excess levels of ACE reduces angiotensin II.

## Safety and Cautions

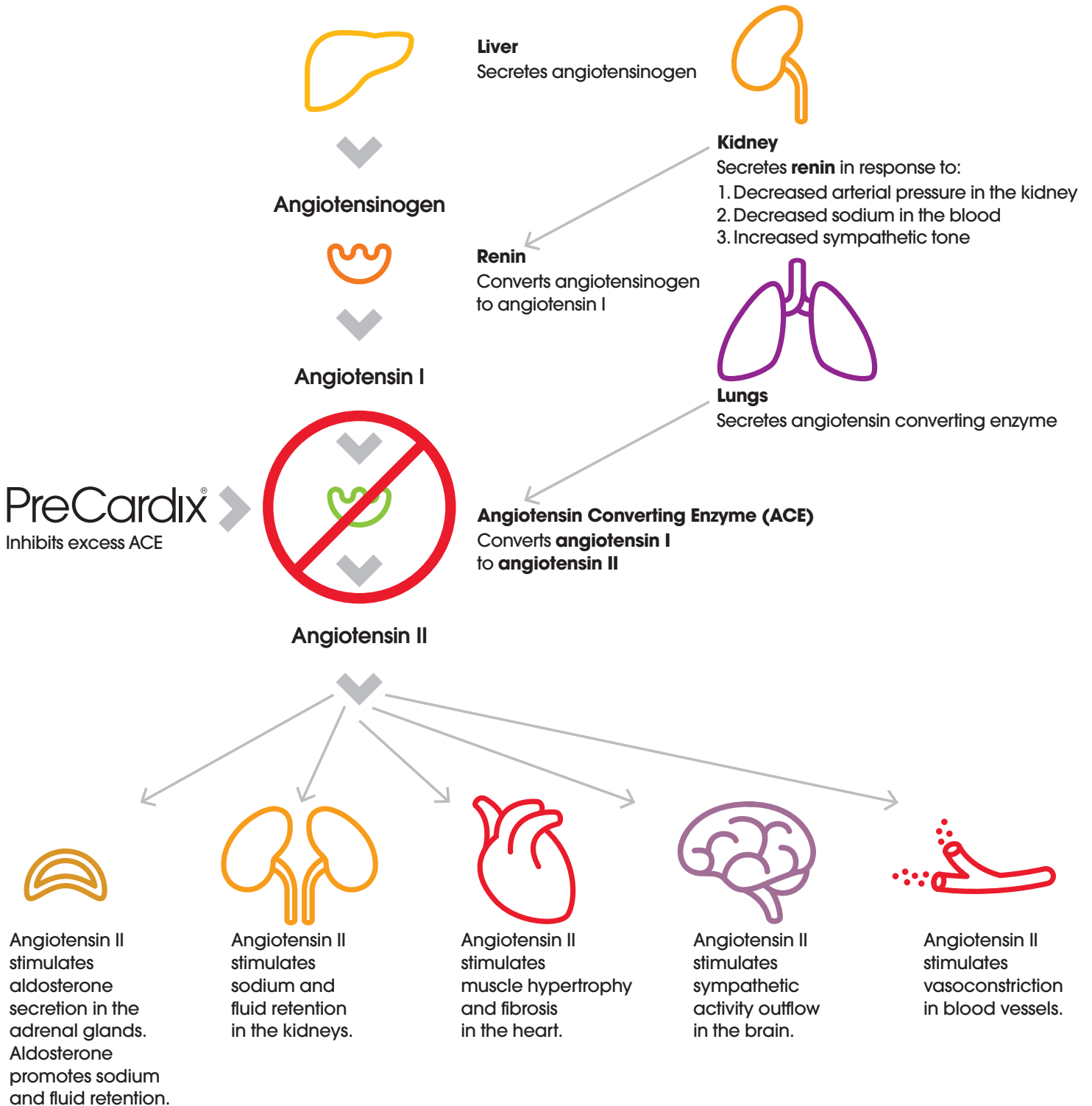
PreCardix® clinical trials were conducted on a healthy population without pre-existing medical conditions. Cautions are inferred based on the cautions for common ACE inhibiting medication. Individuals with pre-existing conditions should be closely monitored by their health care provider when initiating PreCardix®.

Do not take PreCardix® if you:

- have a shellfish allergy
- have a history of angioedema related to previous use of ACE inhibitors
- have renal artery stenosis
- are pregnant or breastfeeding
- are age 18 or under

# How does PreCardix® support blood pressure health?

## Bioactive marine peptides - ACE Inhibitor Mechanism



## Side effects

PreCardix® does not have any known serious side effects. It has not been found to cause side effects sometimes associated with ACE inhibitor medication such as dry cough, itching, edema (swelling), high potassium levels, or hypotension (low blood pressure).

PreCardix® may cause moderate nausea. One case of mild; euphoric mood, fatigue, upper abdominal pain, and headache occurred during the clinical trial.

## Taking PreCardix® with other Medication or Supplements

Consult with your primary health care provider before adding PreCardix® along-side other medications or supplements. Do not discontinue current medication without consulting with your health care provider. Monitor blood pressure regularly.

PreCardix® was not studied in combination with other medications or supplements. Interactions are inferred based on documented interactions of common ACE inhibiting drugs. Other interactions may also occur.

The effect of PreCardix® on blood pressure may be augmented by other blood pressure medication or natural health products and cause low blood pressure. This effect has been well-documented with individuals combining alpha-blocking medication and ACE inhibitors after the first dose. Monitor for this potential effect.

PreCardix® bioactive marine peptides did not increase potassium levels in the clinical trial. However, due to the ACE inhibiting action, potassium levels should be monitored frequently, particularly with agents that increase serum potassium, such as potassium-sparing diuretics, potassium supplements, and potassium-containing salts.

A possible causal relationship between ACE inhibitor treatments and allopurinol (a pharmaceutical treatment for gout) may lead to hypersensitivity. PreCardix® should be used cautiously with allopurinol until further research establishes safety.

The use of NSAIDs (such as Ibuprofen) may reduce the effect of ACE inhibiting medication. Monitor blood pressure regularly if you are taking NSAIDs with PreCardix®.

Intravenous iron infusion should be administered cautiously in individuals using PreCardix®. ACE inhibitors may augment the systemic effects of IV iron. Oral iron supplementation is not a concern.

Individuals taking lithium should have lithium levels monitored frequently. ACE inhibitors may decrease renal elimination of lithium, leading to lithium toxicity (CNS symptoms, ECG changes, renal failure). PreCardix® was not studied along-side lithium medication.

## Interactions with food

There are no known interactions with food.

## Study Review

The clinical trial reporting PreCardix® bioactive marine peptides' effect on blood pressure health was reviewed by Health Canada, Hypertension Canada, and Canadian pharmacists. The study is peer-reviewed and published in the International Journal of Hypertension.

Read the study here:

Hindawi | International Journal of Hypertension | August 5, 2019 Volume 2019 | Article ID 2345042  
<https://www.hindawi.com/journals/ijhy/2019/2345042/>

## Health and Wellbeing Content

For expert advice on blood pressure health, and overall health and wellbeing, visit our growing library of articles at [precardix.com/blog](https://precardix.com/blog) or contact us at [support@precardix.ca](mailto:support@precardix.ca).

### Important Information

Always consult with your health care provider before making changes to your blood pressure management plan. PreCardix® does not treat, cure or prevent medical conditions.

Measure and monitor blood pressure regularly. Know the signs of heart attack and stroke. Do not take PreCardix® if you are pregnant, breastfeeding, have renal artery stenosis, history of angioneurotic edema, or shellfish allergy.

## Measuring and Monitoring Blood Pressure on PreCardix®

Use the following chart or download the PreCardix® Blood Pressure App to establish your baseline blood pressure and record weekly results.

### Baseline Blood Pressure - Your Blood Pressure Before Starting PreCardix®

Please record your baseline blood pressure. Example 120/80. The top number is your systolic blood pressure. The bottom number is your diastolic blood pressure. For more information visit [PreCardix.com](http://PreCardix.com) FAQs - Search 'how do I measure my baseline and weekly blood pressure'.

|                   | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 | Day 6 | Day 7 | Average |
|-------------------|-------|-------|-------|-------|-------|-------|-------|---------|
| AM Blood Pressure |       |       |       |       |       |       |       |         |
| PM Blood Pressure |       |       |       |       |       |       |       |         |

### Weekly Blood Pressure - Your Blood Pressure While Taking PreCardix®

Please record your blood pressure each week. Example: 120/80. At the end of eight weeks record the difference between your baseline blood pressure and your week 8 blood pressure. Every 2 mmHg improvement has a significant effect on outcomes.

|                   | Average Baseline | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Change |
|-------------------|------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| AM Blood Pressure |                  |        |        |        |        |        |        |        |        |        |
| PM Blood Pressure |                  |        |        |        |        |        |        |        |        |        |