

100% Natural Calcium Supplement
StimuCal® is a clinically proven, concentrated
source of natural calcium that is safe and effective.

StimuCal®

WITH BONE STIMULATING PROTEIN



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100%
NATURAL

Calcium - more than a bone story

Calcium is critical for not just the growth and maintenance of healthy bones and teeth, it's also vital to proper functioning of the central nervous system where calcium ions are essential in converting electrical impulses into chemical signals in the brain.

In fact, it is this role in the central nervous system that causes the body to strip calcium from the skeleton to maintain proper function when blood calcium levels are too low.

The body knows best

We know that calcium is critical to many physiological functions so it's no surprise that things can go wrong when there are disturbances in calcium balance. Persistent excessive calcium in the blood has been linked to a number of negative health outcomes. On the other hand, low levels of blood calcium over time comes at significant cost to bone health.

Blood calcium is controlled within very narrow limits and complex mechanisms exist to deal with acute alterations in circulating levels. However, when the body needs to continually deal with excessive blood calcium, this can come at the expense of long term health. For many years large, rapidly absorbed doses of calcium have been associated with issues such as kidney stones, milk alkali syndrome (hypercalcaemia and resultant renal insufficiency), and increased rates of cardiovascular disease morbidity and mortality in dialysis patients.

Yet, despite the fact that the importance of the calcium balance is clear, and the negative health impacts of chronically high blood calcium levels are well known, many of the supplemental calcium products available are still designed to be rapidly absorbed, or are marketed in a "once daily" dosing format.

Now, a clear link has been demonstrated between calcium supplementation and increased risk of heart attacks, in otherwise healthy individuals. This is thought to be related to the rapid spiking of blood calcium levels immediately following ingestion of the supplement.^{1,2,3,4}

A Natural product delivered naturally

StimuCal® is not artificially modified calcium. It does not rely on chemical coatings and additives which delay time, but not rate, of calcium release.

Research has also shown that calcium from food is more slowly absorbed than calcium from supplements and does not cause the same spikes in blood calcium levels.⁵ Unsurprisingly, research also shows that food sources of calcium do not increase the risk of heart attack.⁶

With this issue in mind, StimuCal® has been specifically developed to work in the same way as a food source of calcium, releasing calcium slowly into the blood stream, without disrupting normal levels. A natural calcium source, delivered in a natural way which the body can digest and absorb as required.



StimuCal® is clinically proven to deliver calcium without causing spikes in blood calcium levels

StimuCal® has been carefully designed, developed and clinically proven to deliver calcium in a 100% natural, pure bone protein complex.

The pure bone protein in StimuCal®, which the body is able to digest, as it would a food, acts as a biological co-factor, slowing the delivery of calcium. As a result, there is a safer, more controlled release of calcium into the blood, rather than dumping of an excessive, potentially harmful load.

Clinical studies have shown that the peak blood calcium levels four hours after consuming StimuCal® are 45% - 49% lower than after consuming the same dose of calcium carbonate or calcium citrate.⁷

Safe and effective

While StimuCal® delivers calcium without the spike in blood levels, it makes no sacrifices in effectiveness.

StimuCal® suppressed CTX and P1NP, two key markers of bone turnover, by an identical amount to calcium carbonate and calcium citrate after 90 days of continuous supplementation in a randomised controlled trial of postmenopausal women.

StimuCal® is clinically proven to deliver the same level of efficacy as both calcium carbonate and calcium citrate as measured by the ability to suppress key markers of bone turnover.

More than just a calcium

Complete bone health requires not just access to optimal levels of calcium, but also the ability to ensure that the bones are able to put that calcium to use and form new bone, a process known as osteogenesis. Substances that can stimulate osteogenesis are described as osteoinductive.

Independent testing has verified the presence of critically important osteoinductive bone stimulating growth factors and bone matrix proteins in StimuCal®.

Unlike conventional calcium supplements, such as calcium citrate and calcium carbonate, where calcium is delivered in biologically inert carriers, StimuCal® contains protein (25% on average) which is rich in essential osteoinductive bone matrix components, including type I collagen, osteocalcin and bone stimulating growth factors.

Specifically, testing has verified the presence of osteoinductive growth factors IGF1 and 2, and TGFb.

StimuCal[®] Features

- StimuCal[®] is a concentrated source of supplemental calcium to support optimal bone density.
- StimuCal[®] is designed specifically to deliver calcium without disrupting the delicate blood calcium balance.
- StimuCal[®] is clinically proven to promote bone matrix deposition and mineralisation⁹.
- StimuCal[®] is a source of natural polymer type 1 collagen to support bone matrix formation.
- StimuCal[®] is a source of critically important bone stimulating growth factors with known osteoinductive activity.
- StimuCal[®] is manufactured from 100% safe and natural raw materials.
- StimuCal[®] contains no artificial additives or modifiers.

Type 1 Collagen - a critical structural bone protein and key component of StimuCal[®]

StimuCal[®] is a rich source of native type I collagen polymers, containing on average 20% of this important biological protein.

That means for every gram of StimuCal[®] consumed 200mg of type I collagen is delivered along with 250mg of natural calcium.

Type I collagen is the most abundant protein in the body and the predominant collagen found in adult bone.

As the building block for all the bodies' major systems, collagen builds and supports bone matrix and repairs connective tissue.

Type I collagen has also been shown in research to influence bone cells by enhancing osteoblast differentiation,⁸ a process that is critical to the bone mineralisation process. Specialised analysis of StimuCal[®] confirms the presence of 18 separate amino acids, including hydroxyproline and hydroxylysine which are specific to collagen and especially important for collagen production.

StimuCal[®] 100% Natural Calcium Supplement contains:

- **25% calcium** within a calcium phosphate mineral complex helping to make bones hard and strong.
- **25% pure bone protein** - the specialised bone matrix protein in StimuCal[®] contains critically important growth factors (IGF 1 and 2, TGF β) and osteocalcin that help to lay down new bone.
- **20% natural polymer collagen and amino acids** - contained within the specialised bone matrix protein, collagen is no longer a typical part of the diet, but remains an important nutrient for bones and joints. Part of the natural matrix material of bones, teeth and connective tissue, collagen has been shown to promote bone matrix formation.
- **12% Phosphorous and trace minerals** – including magnesium and zinc, these naturally occurring minerals in StimuCal[®] provide added bone friendly nutrition.

References:

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