



# **Osteosine**<sup>™</sup>

# The Growing Demand for Bone Health Ingredients in the Supplement Industry

The supplement industry has experienced a significant surge in demand for bone health ingredients in recent years. This trend is not surprising, considering that maintaining healthy bones is crucial for overall wellness and quality of life. However, with the growing number of bone health products and information on the market, it can be challenging to navigate and understand what truly makes a bone health ingredient effective.

As a result, the goal here is to offer industry professionals and brand owners valuable insights into the bone health ingredient market and guide them in incorporating bone health into future product formulations.

# The Role of Bone Health in Overall Wellness

Bone health is a critical component of overall wellness, playing a vital role in numerous body functions beyond simply providing structure. Healthy bones support our body's mobility, protect vital organs, anchor muscles, and store essential minerals like calcium and phosphorus which are vital for many physiological processes. Furthermore, our bones continuously remodel themselves throughout our lives — a process that involves the removal of old bone tissue and the formation of new, healthy bone tissue. Hence, maintaining bone health is not just about potential bone-related issues, it's also about ensuring the overall functionality of our bodies.

As we age, the balance between bone removal and formation may start to shift, highlighting the crucial need for effective bone health ingredients to support this delicate equilibrium. By prioritizing bone health, we are, in fact, investing in our body's overall wellness and longevity.

# **Understanding Bone Health Ingredients**

There is a wide array of bone health ingredients available on the market, each claiming to be the best at supporting healthy bones. However, understanding what makes these ingredients effective can help brands and manufacturers make informed decisions when choosing ingredients for their products. The primary bone health nutrients include calcium, vitamin D, magnesium, phosphorus, and vitamin K2. Calcium is the most abundant mineral in our bones, while vitamin D plays a crucial role in helping our body absorb and use calcium efficiently. Magnesium assists in converting vitamin D into its active form, thus indirectly contributing to bone health. Phosphorus is also essential for strong bones as it works alongside calcium to build and maintain bone tissue. Lastly, vitamin K2 helps regulate the movement of calcium in the body, preventing it from depositing in soft tissues and instead directing it toward bones.

Beyond these essential nutrients, there is an increasing trend in the use of specialty branded ingredients in bone health products. These ingredients often come with a strong scientific backing and offer unique advantages over generic nutrients. Specialty ingredients can be derived from a variety of natural sources and undergo unique processing methods to preserve their nutritional content and ensure optimal efficacy.

#### THE IMPORTANCE OF A BALANCED DIET

It's crucial to remember that our body requires a balanced intake of all essential nutrients for optimal bone health. To maximize the benefits of bone health ingredients, they should be consumed as part of a healthy and well-rounded diet. A diet rich in fruits, vegetables, whole grains, and lean proteins can provide vitamins and minerals necessary for strong bones. Additionally, regular physical activity is essential for maintaining healthy bones as it helps stimulate bone growth and slows down bone loss.

#### ADDRESSING NUTRIENT DEFICIENCIES

Despite the availability of various bone health ingredients, nutrient deficiencies are still prevalent globally. In fact, according to the World Health Organization, nearly 1 in 3 women and 1 in 5 men over the age of 50 are affected by low bone mass and deterioration of bone tissue. The most common nutrient deficiencies that contribute to poor bone health include calcium, vitamin D, and magnesium. Therefore, it's important to consult with a healthcare professional to identify and address any nutrient deficiencies that may be affecting your bone health. Not only do bone health ingredients like calcium, vitamin D, and magnesium contribute to strong bones, but they also have other health benefits. For example, calcium is essential for muscle function and nerve transmission, while vitamin D supports immune function and mood regulation. By incorporating bone health ingredients into products, manufacturers not only support bone health but also provide additional benefits for the overall wellness of their end users.

# The Role of Supplements

In some cases, it may be challenging to obtain adequate amounts of bone health nutrients from food alone. This is where supplements can play a crucial role in supporting healthy bones. Branded supplement ingredients like Osteosine<sup>™</sup> provide targeted support for bone health with its unique combination of botanical extracts. It's important to note that while supplements may be beneficial for overall wellness, they should not be used as a substitute for a healthy diet.

#### MARKET DEMAND FOR BONE HEALTH SUPPLEMENTS

With increasing awareness of the importance of bone health, there is a growing demand for products that support and maintain strong bones. This demand is not limited to just older populations but also extends to athletes and individuals looking to improve their overall wellness. Incorporating bone health ingredients into various products from general wellness products to sports nutrition supplements could help meet this demand and provide consumers with convenient options to support their bone health.

According to a report by Grand View Research, the global bone health supplements market size was estimated at USD 2.14 billion in 2019 and is expected to grow at a compound annual growth rate (CAGR) of 7.2% from 2020 to 2027. This demand is driven by an increased understanding of the importance of bone health in overall well-being and the role of dietary supplements in supporting healthy bone maintenance.

Moreover, a survey by the Council for Responsible Nutrition (CRN) revealed that bone health was among the top reasons adults in the U.S. took dietary supplements in 2019. The trend testifies to the growing consumer awareness and rising demand for bone health supplements.

These statistics highlight a lucrative opportunity for supplement manufacturers to introduce effective bone health ingredients into the marketplace.

The supplement industry plays a vital role in meeting the demand for bone health products. It offers various options for consumers to choose from, whether it's through traditional supplements like pills or through innovative delivery formats like gummies or RTD products. With the availability of these products, individuals can easily incorporate bone health ingredients into their daily routines.

#### FORMULATING WITH OSTEOSINE™

One such bone health ingredient is Osteosine™, a specialized food and dietary ingredient Composed of highly fractionated *Cnidium monnieri* and *Cuscuta chinensis* extracts. This ingredient offers an innovative approach to promoting bone health by supporting the body's process to deposit new bone while also helping to slow down the breakdown of old bone tissue. Thus supporting healthy bone structure.

Osteosine<sup>TM</sup> has been the subject of detailed research, with *six in vitro* and *two in vivo* studies demonstrating its effectiveness in promoting bone density and structural strength, as long as a proper diet and regular exercise are maintained. Through this scientific backing, Osteosine<sup>TM</sup> stands as a promising ingredient in the realm of bone health supporting ingredients.

### **Top Considerations for New Bone Health** Formulas

Developing bone health supplements requires a meticulous approach from brands and product formulators. Understanding the market landscape, selecting high-quality ingredients, and adhering to regulatory guidelines are all essential starting points to developing the right formula with the right blend of ingredients for your particular audience.

#### UNDERSTANDING MARKET DEMAND

When developing new bone health supplements, it's vital for brands to consider consumer preferences. Are consumers seeking traditional supplements, or are they leaning toward innovative delivery methods like gummies or ready-to-drink products? Understanding these preferences is crucial to both meet market demands and to help your product stand out to your desired target consumer.

#### SOURCE AND QUALITY OF INGREDIENTS

Carefully selecting ingredients backed by scientific research is key. Brands should prioritize ingredients from reputable sources, ensuring high quality for maximum potency and consumer safety. Scientific evidence supporting the effectiveness of chosen ingredients in promoting bone health is essential. This is not only true for branded ingredients, but also the well-known vitamins and minerals like calcium and vitamin D. The quality and reliability of each ingredient selected have a direct impact on the final product.

#### MARKETING

Marketing bone health supplements requires a dual strategy: education and appeal. Educate consumers on bone health's importance and your product's role, highlighting scientific evidence where applicable - this is where research-backed branded ingredients are helpful. Simultaneously, position your supplements as a convenient, high-quality option that complements a healthy lifestyle. Tailor your approach for your ideal consumer demographics, ensuring packaging and formats align with their preferences. Throughout, stay within all applicable regulatory guidelines, focusing your marketing approach on the true benefits of the product and maintaining transparency with your end users.

Brands should remember that the aim isn't to treat or cure diseases but to support overall wellness and bone health. The formulation should complement a balanced diet and an active lifestyle that includes regular physical activity.

## Next Steps: Collaborate with NuLiv Science for Bone Health Solutions

Acknowledging the critical role of bone health within overall wellness is essential. As the population ages and awareness regarding maintaining strong bones grows, the demand for effective bone health ingredients continues to rise. Osteosine<sup>™</sup> stands ready to support this goal of maintaining healthy bones.

Integrating bone health ingredients like Osteosine<sup>™</sup> into new product formulations presents an opportunity for manufacturers to meet this escalating demand. Crafting products that not only endorse overall well-being but also bolster bone health remains pivotal.

To delve deeper into harnessing advanced bone health innovations or to explore potential formulations with NuLiv Science, our team is ready to discuss. Let's collaborate on next level formulations that cater to the evolving consumer needs, shaping a healthier future together.



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