

SUPREME

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FUNCTIONAL FOOD CONCENTRATES SUPREME SERIES
功能性濃縮食品至尊系列

SUPABONE

超級骨骼健



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PRODUCTS YOU TRUST 信譽產品

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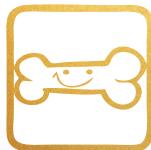
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超級骨骼健的 7 大好處

1. 補骨鎖鈣同時護心，或有助避免血管因補鈣而鈣化
2. 保護骨骼
3. 集合多種礦物質，全方位強健骨骼
4. 支持及維持健康牙齒生長
5. 加強肌肉協調力及肌肉神經網絡
6. 適合關注甲狀腺健康人士使用
7. 或有助於穩定血壓



* 此產品沒有根據《藥劑業及毒藥條例》或《中醫藥條例》註冊。為此產品作出的任何聲稱亦沒有為進行該等註冊而接受評核。此產品並不供作診斷、治療或預防任何疾病之用。

甚麼是骨骼系統？

骨骼系統是人體的支架，除了可以支撐人體的肢體動作外，亦具有保護身體器官、製造紅血球及白血球、儲存礦物質（如：鈣、鎂、磷）等功能。

我們的骨骼每天都會自行製造新的骨骼組織，但同時亦會分解並取代舊的骨骼組織，而且身體還會從骨骼中提取身體所需的營養素以維持其他器官的正常運作。骨骼完成一次更新周期需要 10 年，因為身體中的更新速度不同，老舊骨頭和新骨頭始終同時存在。到中年後，骨骼的更新速度會減慢，因此我們的骨骼傾向於變薄，這就是骨質疏鬆形成的原因。因此，我們必須確保骨骼有足夠的營養素以維持其所需。



破骨細胞

血鈣低時，破骨細胞會分解骨骼中的鈣質，並釋放至血液中。



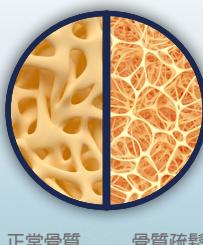
造骨細胞

血液中鈣濃度高時，造骨細胞會將血中鈣質存放至骨骼。

於衆多種的營養素中，骨骼裡以鈣質的含量為最多。約 99% 的鈣質都會被儲存於骨骼及牙齒中，而其餘約 1% 的鈣質就會被分佈於人體內各個器官及組織內。少量的鈣質足以維持體內無數負責神經傳導及肌肉收縮的重要離子，因此礦物質的平衡對維持身體健康非常重要。若然稍有偏差，已可令骨骼系統變得脆弱。

當骨骼開始變弱時，身體會出現甚麼問題？

- 骨質疏鬆
- 腰酸背痛、駝背
- 牙齒鬆動
- 指甲脆弱
- 肌肉鬆弛無力、行動不便



- 容易抽筋
- 身高每年都降低
- 呼吸困難
- 心血管阻塞
- 影響睡眠質素
- 情緒容易波動

使骨質流失的風險因素有哪些？

不良飲食習慣

經常飲用酒精、咖啡因、碳酸類飲品、食用甜食、濃味、高蛋白質等的飲食習慣可使血液中產生過多的磷，除了會影響身體對礦物質的吸收，更會加速骨鈣釋放到血液中，導致骨質流失。

有乳糖不耐症的人士

大部份人認識的補鈣途徑就是以攝取乳製品為主，而乳製品中所含的乳糖，卻不是人人都可承受到。全球約有一半以上的人士，小腸都缺乏了可幫助分解乳糖的酵素。而且隨著年齡增長，體內的乳糖酵素亦會逐漸減少，使人一飲用或食用乳製品的同時，也刺激了腸道，引起腹脹、肚瀉、腸絞痛等症狀。這些類別的人士就更容易因腸道的不適，限制了對鈣的攝取，從而更易增加骨質流失的問題。



沒有恆常運動習慣的人士

根據世界衛生組織的統計，全球每 4 個人中，就有 1 個人沒有運動習慣。如骨骼沒有恆常的壓力以刺激其生長時，就會增加骨質流失的速度。沒有運動習慣的人士亦更容易因身體肌肉萎縮，而減少了對骨骼的保護性。

每天接觸太陽少於 30 分鐘的人士

陽光其實可刺激身體製造維生素 D。而維生素 D 能有助吸收鈣質，是令骨骼強健的元素之一。根據臨床研究的證據，學齡兒童及青少年有 51% 為維生素 D 缺乏，90.3% 為維生素 D 不足。平日不易接觸到日曬的工作一群或是經常使用防曬用品的女士，都是體內維生素 D 不足，令骨質流失速度加快的高危一族。



甲狀腺健康欠佳人士

甲狀腺負責促進體內組織的新陳代謝，而在甲狀腺後方的副甲狀腺，則有調節體內鈣磷代謝的作用。它可促使骨骼釋放出鈣質，亦可增加腸道對鈣質的吸收和控制鈣質流失，以維持血鈣的平衡。因此，患有副甲狀腺疾病的人士，骨質流失的風險亦會增加。

長期使用藥物

繁忙的都市生活令不少人都有長期胃病的困擾，然而，如長期服用含鋁質的胃藥（制酸劑），會令胃酸減少，從而影響鈣和其他有助骨骼的礦物質吸收。

另外，類固醇類藥物亦可影響副甲狀腺的機能，加速鈣質流失。



女性更年期

女士進入了更年期後，由於卵巢的分泌功能逐漸減慢，體內的女性荷爾蒙分泌量亦同時減少，從而使骨質流失的速度加快。根據香港骨質疏鬆學會資料，女士停經後的首十年是骨質流失的高峰期。

年齡

骨骼的形狀與大小都會隨年齡而改變。骨骼於童年及青少年期時會迅速增長，在 30 多歲時會達至頂峰水平。而在 40 歲後，造骨的細胞活躍度就會開始下降，破骨細胞的活躍度則會增加，形成骨質密度下降的現象。



毒素積聚 - 重金屬

重金屬屬環境污染物之一，可通過水、食物、空氣等進入人體，從而對人體造成慢性危害。曾有研究指出，重金屬鉛及鎘都可與低骨質密度有關¹。鎘可於海產、一手或二手煙中存在，若長期累積，可影響骨骼鈣質的新陳代謝，誘發骨質疏鬆。而飲用未經過濾的食水、傳統中藥等都可含有鉛。鉛則可抑制鈣和鋅等對骨骼有用的礦物質之吸收，使骨骼更容易變得脆弱。

參考資料：

- I. Lim, H. S., Lee, H. H., Kim, T. H., & Lee, B. R. (2016). Relationship between heavy metal exposure and bone mineral density in Korean adult. Journal of bone metabolism, 23(4), 223-231.d

基因

骨量頂峰值很大程度上是由我們每個人獨一無二的基因決定。以維生素 D 受體 (VDR) 基因為例，於骨質密度的基因層面上可影響高達七成，因為它與身體如何平穩鈣、骨細胞的生長及分解、腸道吸收鈣質的能力等有關。但並不是每個人都有做基因檢測去了解自己的骨骼健康，因此很多人會錯過了補充營養的黃金期，使骨質流失的風險增加。



如何加強骨骼健康？

由於人體無法自行製造礦物質，所以我們必須每天都要確保身體有攝取到足夠的來源。

保持良好的飲食習慣



在不同的人生階段也需要吸收足夠的礦物質。我們必須保持每天都有從膳食中攝取一些含有較高鈣的食物以應付身體所需，如：硬豆腐、杏仁、黑豆、芝麻、西蘭花、沙丁魚等，此類食物來源含鈣量雖然比乳製品低，但卻大大減低了對腸道的刺激性，亦使患有乳糖不耐症的人士有額外的補鈣來源選擇。多攝取一些非基因改造的黃豆和不含激素的家禽類亦有助減少從飲食中攝取到的不良雌激素，減少影響體內平衡。

恆常及適當的運動和接觸陽光

運動可幫助強化造骨細胞在骨骼內的耐受力，從而促進骨骼的血流量，有刺激骨質量與密度的作用。特別是負重運動，如：深蹲、平板支撐等動作。適量的運動可同時鍛鍊肌耐力、提升關節的柔軟度、改善身體的協調力等作用，從而預防因摔倒而引起骨折。建議每天進行最少 20 分鐘的戶外運動，既可強化肌肉和骨骼，亦可讓皮膚接受日光照射，增加自身合成維生素 D，更有助於鈣質吸收。

保持良好睡眠質素，早睡早起

保持良好睡眠質素，早睡早起。一般以成人計算，每人每晚應睡 7-8 個小時。最佳的休眠時間是在晚上 9 時至早上 6 時之間。在熟睡期間，身體會釋放生長荷爾蒙，刺激骨骼生長。所以，充分睡眠能令你的骨骼系統達至最佳效能。



排毒

今時今日，接觸到毒素是無可避免的。毒素積聚，如：重金屬，令我們的骨骼系統更容易流失營養。因此，恆常的排毒有助加速去除身體和腸道的毒素。乾淨無毒素的身體可令骨骼系統的功能發揮至最佳狀態。

了解自己基因中的潛在風險

幾乎大部份的疾病都是與基因功能發生異常有關。雖然我們的基因並不能改變，但我們可以透過基因檢測了解自己身體的潛在風險，掌握適合自己的日常飲食模式、運動模式和營養補充等數據，減低患病風險。

幹細胞

骨骼合成亦需要身體內幹細胞的協助。然而，我們的幹細胞可隨著年齡而衰老，變得難以協助骨骼合成。現時科技已可從自體的脂肪內提取到幹細胞，透過頂尖技術以誘導這些幹細胞成為骨骼幹細胞，有助對抗因年齡而衰老的骨骼系統。

使用加強骨骼系統的補充品

以香港食物安全中心去年公佈的「香港首個總膳食研究 - 矿物質」營養數據，與中心網頁於 2014 年上載的食物營養資料比較，發現不少食物的礦物質含量都有下跌的趨勢，其中雞肉（腿部瘦肉）的鈣含量更大跌 48%。美國的研究亦發現水果的維生素及礦物質含量，在過去 10 年亦有下跌 25% 至 50% 的情況。因為身體不能製造維持骨骼系統的營養素，而從正常飲食中獲得所有必須營養素以滿足每日所需亦逐漸變得困難，所以補充品是必須的。而最新科研顯示，除了鈣質以外，維生素 D3、K2、鎂和鋅等營養素均對骨骼系統有更大的益處。

鈣質的每天攝取量是幾多？ 相當於幾多高鈣食物？

* 全脂奶
(杯)



熟白菜
(碗)



熟芥蘭
(碗)



熟西蘭花
(碗)



熟硬豆腐
(100 克)



含較高鈣質的食物

鈣質含量

291 毫克

158 毫克

94 毫克

72 毫克

320 毫克

每日鈣質攝取量

兒童和青少年 (1300 毫克)

4.46 杯

8.2 碗

3.8 碗

18 碗

400 克

20 歲至 59 歲人士 (1000 毫克)

3.43 杯

6.3 碗

10.6 碗

13.8 碗

310 克

懷孕婦女 (1300 毫克)

4.46 杯

8.2 碗

13.8 碗

18 碗

400 克

60 歲至 84 歲人士 (1300 毫克)

4.46 杯

8.2 碗

13.8 碗

18 碗

400 克

* 注：全脂奶並不適合有乳糖不耐症人士作補鈣來源

由以上計算可見，若我們要從日常食物中攝取到足夠每天所需的鈣質來源，進食份量太多之外，也有機會增加了卡路里的攝取，另外，全脂奶含有雌激素，而豆腐的原材料大豆是其中一種有基因改造品種的農作物，所以未必是最健康的補鈣選擇。因此，選擇優質的功能性補充品就變得更為明智。

部份資料來源：香港衛生署、世界衛生組織、香港食物安全中心營養查詢系統

甚麼是超級骨骼健？

超級骨骼健由純天然海藻鈣提煉而成，是一款嶄新的功能性鈣質補充品。獨有的複方配方，讓所有成份結合起來，為整個配方帶來協同效應，更容易被身體識別和吸收，使其更有別於一般骨骼保健品，讓我們更安全地為骨骼提供所需營養。一粒超級骨骼健含有 400 毫克鈣，適合人體每次的吸收份量，每天兩粒已可滿足大部份人士每日所需。



成份：

海藻鈣 (Aquamin®)

鎂 (Aquamin®)

OSTEOBALANCE 專有配方：

鉀、鋅、硼、維生素 D3、維生素 K2 (MK-7)

成份的優良功效

海藻鈣 (Aquamin®)

Aquamin® 是來自純淨無污染之北歐海域的海藻鈣，含豐富的鈣質。其實，在人體內，約 99% 的鈣質都會被儲存於骨骼及牙齒中，而其餘約 1% 的鈣質就會被分佈於人體內各個器官及組織內。鈣質對於骨骼的結構發展極為重要，且兼具支撐起整個身體完整架構與體內細胞代謝等的重任。包括凝血功能、神經傳導以及配合肌肉收縮動作反應的功能，其實也與體內的鈣質有關。



鎂 (Aquamin®)

Aquamin® 除了含有豐富的鈣質外，亦有豐富的鎂質。而鎂質都是構成骨骼的主要成份之一，人體的鎂約 70% 存在於骨骼中，能與鈣產生協同作用，加強鈣質吸收效果，進一步鞏固骨骼健康，亦可有助防止骨質流失。在人體內也具有相當重要的生理功能，包括核酸和蛋白質的合成，都需要鎂的參與。鎂亦可以有助維持心臟、肌肉、神經的正常功能，並且減少鈣質沉澱於組織以及血管壁，是人體不可或缺的宏量礦物質。

OSTEOBALANCE 專有配方 - 鉀、鋅、硼、維生素 D3、維生素 K2 (MK-7)：



I. 鉀

鉀是由其中一種必要礦物質，可以幫助細胞正常運作。鉀的主要功能是調節體液平衡，控制心臟和肌肉收縮的電流活動以及神經傳導。因此，若未攝取足夠的鉀，神經和肌肉（包括心臟）可能無法正常運作。充足鉀攝取亦有助維持骨骼礦物質密度，降低骨質流失危險。

2. 鋅

鋅是維持人體新陳代謝的必需礦物質，90% 存在於肌肉及骨骼之中。鋅對於維持肌肉收縮功能是很重要的元素，亦是維持免疫力所需元素之一。研究指出，鈣、鎂、鋅和維生素 D 一起服用，有利於維持骨骼健康。

3. 硼

硼是人體必需的微量礦物質之一，普遍存在於蔬果中（杏仁、花生、榛果、棗、梅乾、葡萄乾、黃豆、葡萄酒、蜂蜜），但是並不含於動物性食品中。它對健康非常重要，最近的研究顯示，硼可以促進鈣、鎂、鉀的吸收和代謝，因此能維持骨質密度，可加速骨折的癒合，對骨骼發育和維護有重要影響。在停經期婦女的飲食中添加硼，可以減少鈣質流失。



4. 維生素 D3

維生素 D，又名陽光維生素，因為太陽的紫外線 B (UV-B) 促進我們的皮膚來合成自己的維生素 D。人體製造維生素 D 的能力會隨著年齡轉弱，老人和比較少到戶外的人很可能成為缺乏維生素 D 的人士。維生素 D 是身體機能所必須的，並有助於鈣的吸收，而且調節血液中鈣的濃度，可以增加骨骼對這些身體所需的礦物質的吸收，從而幫助骨骼及牙齒的生長發育，因此有強健骨骼的作用。另外，維生素 D 亦能維持神經、肌肉的健康，幫助維持肌肉的強度，有助減低因跌倒而導致的骨折風險。



5. 維生素 K2 (MK-7)

維生素 K2 是具有促進和抑制血液凝固因子這兩方面的活性作用，是正常凝血中不可或缺的營養素，而且即使大量攝取亦不會使血液容易凝固。配方採用了由納豆提取的維生素 K2(MK-7)，它最大的功能是防止鈣沉積在動脈中累積。若當鈣沉積在動脈中形成，心臟疾病的風險將會上升。為身體提供維生素 K2(MK-7) 可有助移除血液中的鈣，將其帶到骨骼和牙齒。

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超級骨骼健的好處

I. 補骨鎖鈣同時護心，有助避免血管因補鈣而鈣化

骨骼的造骨細胞所產生的骨鈣素的主要作用是將血中的鈣導入骨骼，有助骨骼重建及生長。而維生素 K2(MK-7) 能夠讓骨鈣素活躍起來，可以阻礙鈣質沉澱於動脈中，從而預防動脈硬化或心臟病等，並且幫助鈣質導入及結合到骨質內，讓骨骼堅固起來，減少骨折風險。因此，要維持健康的牙齒和骨骼，以及一個強大、健康的心血管系統，維生素 K2 (MK-7) 是不可缺少的。

2. 保護骨骼

Aquamin® 是一種從天然海藻鈣中提取出的鈣，相比起同類植物性的鈣質來源，Aquamin® 的吸收率最高，因它具有高生物活性。加上 OSTEOBALANCE 專有配方，更有助鈣質吸收和運用，讓骨骼有足夠的能力支撐身體的重量。



3. OSTEOBALANCE 專有配方集合多種礦物質，全方位強健骨骼

含有豐富的鈣、鎂和 OSTEOBALANCE 專有配方。這些紅藻類從海洋裡吸收了重要的礦物質元素，擁有多種礦物質含量的獨特性，是極佳的鈣質補充來源。足夠的鈣質能夠填補骨質中的縫隙，幫助提升骨質的密度，從而減少因摔倒而出現骨折或骨裂的情況。

4. 支持及維持健康牙齒生長

牙齒主要是由鈣質形成，為人體中最堅硬的組織。當身體缺乏鈣質，便有機會反映在牙齒上，容易形成牙鬆，而這時候因為齒槽骨脆弱、萎縮，也會提高牙周病風險，甚至造成牙齒易脫落。

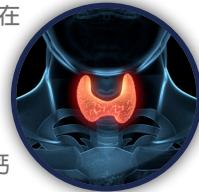


5. 加強肌肉協調力及肌肉神經網絡

Aquamin® 經臨床證實，有效提升關節靈活性，減少關節不適，以及維持健康骨骼組織。另外，配方含有鎂、鉀、鈣，幫助肌肉收縮和放鬆，或有助增加肌肉協調力及減少抽筋。

6. 適合關注甲狀腺健康人士使用

副甲狀腺損傷或功能受損的人士，會導致暫時性或永久性的血鈣低。副甲狀腺在頸部的甲狀腺的後面，副甲狀腺主要分泌副甲狀腺素（parathyroid hormone，PTH），而副甲狀腺素的作用就是管理鈣和磷代謝的重要激素，可以促進骨的吸收、維持一定的血鈣濃度、增加鈣在腸道內的吸收和減少鈣從體內的流失。簡而言之，PTH 可以使人體的血鈣保持在一定的水平，維持人體正常的鈣和磷代謝過程。



7. 或有助於穩定血壓

鈣可以調節細胞活動，是細胞的信號分子。血液中的鈣濃度發生變化會影響平滑肌細胞的收縮功能，從而改變血管阻力。此外，鉀亦可以維持心肌正常功能，對保護血管有一定的作用。

* 此產品沒有根據《藥劑業及毒藥條例》或《中醫藥條例》註冊。為此產品作出的任何聲稱亦沒有為進行該等註冊而接受評核。此產品並不供作診斷、治療或預防任何疾病之用。

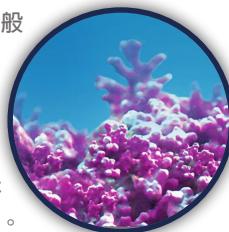
超級骨骼健的獨特性

I. 符合人體每次最佳補鈣進食份量

人體一次不能攝取大於 500 毫克劑量的鈣片，攝取大於 500 毫克的劑量時，吸收率就會開始下降。所以每次一粒含有 400 毫克鈣，適合人體每次的吸收份量。一般成年人每天建議攝取鈣質劑量約為每天 1000 毫克，而一般我們的日常飲食也會攝取到少量鈣質，因此，每天食用份量二粒的超級骨骼健已可滿足大部份人士每日所需。

2. 純天然植物鈣，吸收比碳酸鈣高 45%

Aquamin® 是市面上罕見高生物吸收率及運用率的植物鈣，它的結構比一般合成鈣質有更高活性，是純天然微細份子結構。研究顯示，它比市面上傳統常見的鈣質補充品（碳酸鈣）多 45% 的吸收率，亦不會引致胃氣脹和便祕，減少對身體造成負擔，使我們更易及安全地達到每日鈣質所需。而且，市面上有很多鈣片都是人工或是使用乳製品合成。由於這個配方是萃取自天然藻類植物，所以有乳糖不耐症或對牛奶敏感的人士都適合使用。



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3. Osteobalance 配方，補骨鎖鈣同時護心

Osteobalance 專有配方特別加入兩種幫助鈣質吸收的維生素 K2(MK-7) 和 D3。研究指出，攝取鈣質時配合維生素 K2(MK-7) 和 D3 和其他微量元素能令鈣質更加容易直達骨骼中。加入維生素 D3，能有效將鈣質帶到血液中；加上維生素 K2(MK-7) 成份，再能把鈣質更有效透過血液傳送到骨骼，同時清理血管中剩餘的鈣質，防止血管鈣化和硬化。

參考資料：

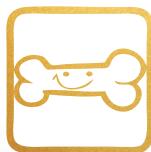
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4. 強化骨骼亦強化肌肉，更全面保護整體骨骼系統

骨骼系統除了骨頭保護之外，其實亦需要肌肉的保護，才可提供穩固的支撐。因此，於選擇骨骼補充品時，配方應要加強到肌肉的協調力之外，亦不應該增加身體負擔，如：胃氣、便祕、血管鈣化等的風險因素。因此，超級骨骼健所含的各種成份配合，就是您更全面的補鈣選擇！

超级骨骼健的 7 大好处

1. 补骨锁钙同时护心，或有助避免血管因补钙而钙化
2. 保护骨骼
3. 集合多种矿物质，全方位强健骨骼
4. 支持及维持健康牙齿生长
5. 加强肌肉协调力及肌肉神经网络
6. 适合关注甲状腺健康人士使用
7. 或有助于稳定血压



* 此产品没有根据《药剂业及毒药条例》或《中医药条例》注册。为此产品作出的任何声称亦没有为进行该等注册而接受评核。此产品并不供作诊断、治疗或预防任何疾病之用。

甚么是骨骼系统？

骨骼系统是人体的支架，除了可以支撑人体的肢体动作外，亦具有保护身体器官、制造红血球及白血球、储存矿物质（如：钙、镁、磷）等功能。

我们的骨骼每天都会自行制造新的骨骼组织，但同时亦会分解并取代旧的骨骼组织，而且身体还会从骨骼中提取身体所需的营养素以维持其他器官的正常运作。骨骼完成一次更新周期需要 10 年，因为身体中的更新速度不同，老旧骨头和新骨头始终同时存在。到中年后，骨骼的更新速度会减慢，因此我们的骨骼倾向于变薄，这就是骨质疏松形成的原因。因此，我们必须确保骨骼有足够的营养素以维持其所需。



破骨细胞

血钙低时，破骨细胞会分解骨骼中的钙质，并释放至血液中。



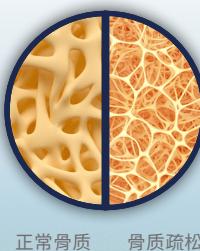
造骨细胞

血液中钙浓度高时，造骨细胞会将血中钙质存放至骨骼。

于众多的营养素中，骨骼里以钙质的含量为最多。约 99% 的钙质都会被储存于骨骼及牙齿中，而其余约 1% 的钙质就会被分布于人体内各个器官及组织内。少量的钙质足以维持体内无数负责神经传导及肌肉收缩的重要离子，因此矿物质的平衡对维持身体健康非常重要。若然稍有偏差，已可令骨骼系统变得脆弱。

当骨骼开始变弱时，身体会出现甚么问题？

- 骨质疏松
- 腰酸背痛、驼背
- 牙齿松动
- 指甲脆弱
- 肌肉松弛无力、行动不便



- 容易抽筋
- 身高每年都降低
- 呼吸困难
- 心血管阻塞
- 影响睡眠质素
- 情绪容易波动

使骨质流失的风险因素有哪些？

不良饮食习惯

经常饮用酒精、咖啡因、碳酸类饮品、食用甜食、浓味、高蛋白质等的饮食习惯可使血液中产生过多的磷，除了会影响身体对矿物质的吸收，更会加速骨钙释放到血液中，导致骨质流失。

有乳糖不耐症的人士

大部份人认识的补钙途径就是以摄取乳制品为主，而乳制品中所含的乳糖，却不是人人都可承受到。全球约有一半以上的人士，小肠都缺乏了可帮助分解乳糖的酵素。而且随着年龄增长，体内的乳糖酵素亦会逐渐减少，使人一饮用或食用乳制品的同时，也刺激了肠道，引起腹胀、肚泻、肠绞痛等症状。这些类别的人士就更容易因肠道的不适，限制了对钙的摄取，从而更易增加骨质流失的问题。

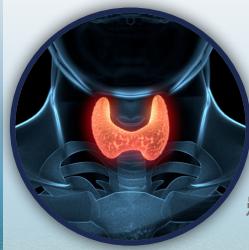


没有恒常运动习惯的人士

根据世界卫生组织的统计，全球每 4 个人中，就有 1 个人没有运动习惯。如骨骼没有恒常的压力以刺激其生长时，就会增加骨质流失的速度。没有运动习惯的人士亦更容易因身体肌肉萎缩，而减少了对骨骼的保护性。

每天接触太阳少于 30 分钟的人士

阳光其实可刺激身体制造维生素 D。而维生素 D 能有助吸收钙质，是令骨骼强健的元素之一。根据临床研究的证据，学龄儿童及青少年有 51% 为维生素 D 缺乏，90.3% 为维生素 D 不足。平日不易接触到日晒的工作一群或是经常使用防晒用品的女士，都是体内维生素 D 不足，令骨质流失速度加快的高危一族。



甲状腺健康欠佳人士

甲状腺负责促进体内组织的新陈代谢，而在甲状腺后方的副甲状腺，则有调节体内钙磷代谢的作用。它可促使骨骼释放出钙质，亦可增加肠道对钙质的吸收和控制钙质流失，以维持血钙的平衡。因此，患有副甲状腺疾病的人士，骨质流失的风险亦会增加。

长期使用药物

繁忙的都市生活令不少人都有长期胃病的困扰，然而，如长期服用含铝质的胃药（制酸剂），会令胃酸减少，从而影响钙和其他有助骨骼的矿物质吸收。另外，类固醇类药物亦可影响副甲状腺的机能，加速钙质流失。



女性更年期

女士进入了更年期后，由于卵巢的分泌功能逐渐减慢，体内的女性荷尔蒙分泌量亦同时减少，从而使骨质流失的速度加快。根据香港骨质疏松学会资料，女士停经后的首十年是骨质流失的高峰期。

年龄

骨骼的形状与大小都会随年龄而改变。骨质于童年及青少年期时会迅速增长，在30多岁时会达至顶峰水平。而在40岁后，造骨的细胞活跃度就会开始下降，破骨细胞的活跃度则会增加，形成骨质密度下降的现象。

毒素积聚 - 重金属

重金属属环境污染物之一，可通过水、食物、空气等进入人体，从而对人体造成慢性危害。曾有研究指出，重金属铅及镉都可与低骨质密度有关¹。镉可于海产、一手或二手烟中存在，若长期累积，可影响骨骼钙质的新陈代谢，诱发骨质疏松。而饮用未经过滤的食水、传统中药等都可含有铅。铅则可抑制钙和锌等对骨骼有用的矿物质之吸收，使骨骼更易变得脆弱。



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基因

骨量顶峰值很大程度上是由我们每个人独一无二的基因决定。以维生素D受体(VDR)基因为例，于骨质密度的基因层面上可影响高达七成，因为它与身体如何平稳钙、骨细胞的生长及分解、肠道吸收钙质的能力等有关。但并不是每个人都有做基因检测去了解自己的骨骼健康，因此很多人会错过了补充营养的黄金期，使骨质流失的风险增加。



如何加强骨骼健康？

由于人体无法自行制造矿物质，所以我们必须每天都要确保身体有摄取到足够的来源。



保持良好的饮食习惯

在不同的人生阶段也需要吸收足够的矿物质。我们必须保持每天都有从膳食中摄取一些含有较高钙的食物以应付身体所需，如：硬豆腐、杏仁、黑豆、芝麻、西兰花、沙丁鱼等，此类食物来源含钙量虽然比乳制品低，但却大大减低了对肠道的刺激性，亦使患有乳糖不耐症的人士有额外的补钙来源选择。多摄取一些非基因改造的黄豆和不含激素的家禽类亦有助减少从饮食中摄取到的不良雌激素，减少影响体内平衡。

恒常及适当的运动和接触阳光

运动可帮助强化造骨细胞在骨骼内的耐受力，从而促进骨骼的血流量，有刺激骨质量与密度的作用。特别是负重运动，如：深蹲、平板支撑等动作。适量的运动可同时锻炼肌耐力、提升关节的柔软度、改善身体的协调力等作用，从而预防因摔倒而引起骨折。建议每天进行最少 20 分钟的户外运动，既可强化肌肉和骨骼，亦可让皮肤接受日光照射，增加自身合成维生素 D，更有助于钙质吸收。

保持良好睡眠质素，早睡早起

保持良好睡眠质素，早睡早起。一般以成人计算，每人每晚应睡 7-8 小时。最佳的休眠时间是在晚上 9 时至早上 6 时之间。在熟睡期间，身体会释放生长荷尔蒙，刺激骨骼生长。所以，充分睡眠能令你的骨骼系统达至最佳效能。



排毒

今时今日，接触到毒素是无可避免的。毒素积聚，如：重金属，令我们的骨骼系统更容易流失营养。因此，恒常的排毒有助加速去除身体和肠道的毒素。干净无毒素的身体可令骨骼系统的功能发挥至最佳状态。

了解自己基因中的潜在风险

几乎大部份的疾病都是与基因功能发生异常有关。虽然我们的基因并不能改变，但我们可以透过基因检测了解自己身体的潜在风险，掌握适合自己的日常饮食模式、运动模式和营养补充等数据，减低患病风险。

干细胞

骨骼合成亦需要身体内干细胞的协助。然而，我们的干细胞可随着年龄而衰老，变得难以协助骨骼合成。现时科技已可从自体的脂肪内提取到干细胞，透过顶尖技术以诱导这些干细胞成为骨骼干细胞，有助对抗因年龄而衰老的骨骼系统。

使用加强骨骼系统的补充品

以香港食物安全中心去年公布的「香港首个总膳食研究 - 矿物质」营养数据，与中心网页于2014年上载的食物营养资料比较，发现不少食物的矿物质含量都有下跌的趋势，其中鸡肉（腿部瘦肉）的钙含量更大跌48%。美国的研究亦发现水果的维生素及矿物质含量，在过去10年亦有下跌25%至50%的情况。因为身体不能制造维持骨骼系统的营养素，而从正常饮食中获得所有必须营养素以满足每日所需亦逐渐变得困难，所以补充品是必须的。而最新科研显示，除了钙质以外，维生素D3、K2、镁和锌等营养素均对骨骼系统有更大的益处。

钙质的每天摄取量是几多？ 相当于几多高钙食物？

* 全脂奶
(杯)



熟白菜
(碗)



熟芥兰
(碗)



熟西兰花
(碗)



熟硬豆腐
(100克)

含较高钙质的食物

钙质含量

291 毫克

158 毫克

94 毫克

72 毫克

320 毫克

每日钙质摄取量

儿童和青少年 (1300 毫克)

4.46 杯

8.2 碗

3.8 碗

18 碗

400 克

20岁至59岁人士 (1000 毫克) | 3.43 杯 6.3 碗 10.6 碗 13.8 碗 310 克

怀孕妇女 (1300 毫克) | 4.46 杯 8.2 碗 13.8 碗 18 碗 400 克

60岁至84岁人士 (1300 毫克) | 4.46 杯 8.2 碗 13.8 碗 18 碗 400 克

* 注：全脂奶并不适合有乳糖不耐症人士作补钙来源

以上计算可见，若我们要从日常食物中摄取到足够每天所需的钙质来源，进食份量太多之外，也有机会增加了卡路里的摄取，另外，全脂奶含有雌激素，而豆腐的原材料大豆是其中一种有基因改造品种的农作物，所以未必是最健康的补钙选择。因此，选择优质的功能性补充品就变得更为明智。

部份资料来源：香港卫生署、世界卫生组织、香港食物安全中心营养查询系统

甚么是超级骨骼健？

超级骨骼健由纯天然海藻钙提炼而成，是一款崭新的功能性钙质补充品。独有的复方配方，让所有成份结合起来，为整个配方带来协同效应，更容易被身体识别和吸收，使其更有别于一般骨骼保健品，让我们更安全地为骨骼提供所需营养。一粒超级骨骼健含有 400 毫克钙，适合人体每次的吸收份量，每天兩粒已可满足大部份人士每日所需。



成份：

海藻钙 (Aquamin®)

镁 (Aquamin®)

OSTEOBALANCE 专有配方：

钾、锌、硼、维生素 D3、维生素 K2 (MK-7)

成份的优良功效

海藻钙 (Aquamin®)

Aquamin® 是来自纯净无污染之北欧海域的海藻钙，含丰富的钙质。其实，在人体内，约 99% 的钙质都会被储存于骨骼及牙齿中，而其余约 1% 的钙质就会被分布于人体内各个器官及组织内。钙质对于骨骼的结构发展极为重要，且兼具支撑起整个身体完整架构与体内细胞代谢等的重任。包括凝血功能、神经传导以及配合肌肉收缩动作反应的功能，其实也与体内的钙质有关。



镁 (Aquamin®)

Aquamin® 除了含有丰富的钙质外，亦有丰富的镁质。而镁质都是构成骨骼的主要成分之一，人体的镁约 70% 存在于骨骼中，能与钙产生协同作用，加强钙质吸收效果，进一步巩固骨骼健康，亦可有助防止骨质流失。在人体内也具有相当重要的生理功能，包括核酸和蛋白质的合成，都需要镁的参与。镁亦可以有助维持心脏、肌肉、神经的正常功能，并且减少钙质沉淀于组织以及血管壁，是人体不可或缺的宏量矿物质。

OSTEOBALANCE 专有配方 - 钾、锌、硼、维生素 D3、维生素 K2 (MK-7):



I. 钾

钾是其中一种必要矿物质，可以帮助细胞正常运作。钾的主要功能是调节体液平衡，控制心脏和肌肉收缩的电流活动以及神经传导。因此，若未摄取足够的钾，神经和肌肉（包括心脏）可能无法正常运作。充足钾摄取亦有助维持骨骼矿物质密度，降低骨质流失危险。

2. 锌

锌是维持人体新陈代谢的必需矿物质，90% 存在于肌肉及骨骼之中。锌对于维持肌肉收缩功能是很重要的元素，亦是维持免疫力所需元素之一。研究指出，钙、镁、锌和维生素 D 一起服用，有利于维持骨骼健康。

3. 硼

硼是人体必需的微量矿物质之一，普遍存在于蔬果中（杏仁、花生、榛果、枣、梅干、葡萄干、黄豆、葡萄酒、蜂蜜），但是并不含于动物性食品中。它对健康非常重要，最近的研究显示，硼可以促进钙、镁、钾的吸收和代谢，因此能维持骨质密度，可加速骨折的愈合，对骨骼发育和维护有重要影响。在停经期妇女的饮食中添加硼，可以减少钙质流失。



4. 维生素 D3

维生素 D，又名阳光维生素，因为太阳的紫外线 B (UV-B) 促进我们的皮肤来合成自己的维生素 D。人体制造维生素 D 的能力会随着年龄转弱，老人和比较少到户外的人很可能成为缺乏维生素 D 的人士。维生素 D 是身体机能所必须的，并有助于钙的吸收，而且调节血液中钙的浓度，可以增加骨骼对这些身体所需的矿物质的吸收，从而帮助骨骼及牙齿的生长发育，因此有强健骨骼的作用。另外，维生素 D 亦能维持神经、肌肉的健康，帮助维持肌肉的强度，有助减低因跌倒而导致的骨折风险。



5. 维生素 K2 (MK-7)

维生素 K2 是具有促进和抑制血液凝固因子这两方面的活性作用，是正常凝血中不可或缺的营养素，而且即使大量摄取亦不会使血液容易凝固。配方采用了由纳豆提取的维生素 K2(MK-7)，它最大的功能是防止钙沉积在动脉中累积。若当钙沉积在动脉中形成，心脏疾病的风险将会上升。为身体提供维生素 K2(MK-7) 可有助移除血液中的钙，将其带到骨骼和牙齿。

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超级骨骼健的好处

1. 补骨锁钙同时护心,有助避免血管因补钙而钙化

骨骼的造骨细胞所产生的骨钙素的主要作用是将血中的钙导入骨骼，有助骨骼重建及生长。而维生素 K2(MK-7) 能够让骨钙素活跃起来，可以阻碍钙质沉淀于动脉中，从而预防动脉硬化或心脏病等，并且帮助钙质导入及结合到骨质内，让骨骼坚固起来，减少骨折风险。因此，要维持健康的牙齿和骨骼，以及一个强大、健康的心血管系统，维生素 K2 (MK-7) 是不可缺少的。

2. 保护骨骼

Aquamin® 是一种从天然海藻钙中提取出的钙，相比起同类植物性的钙质来源，Aquamin® 的吸收率最高，因它具有高生物活性。加上 OSTEOBALANCE 专有配方，更有助钙质吸收和运用，让骨骼有足够的能力支撑身体的重量。



3. OSTEOBALANCE 专有配方集合多种矿物质,全方位强健骨骼

含有丰富的钙、镁和 OSTEOBALANCE 专有配方。这些红藻类从海洋里吸收了重要的矿物质元素，拥有多种矿物质含量的独特性，是极佳的钙质补充来源。足够的钙质能够填补骨质中的缝隙，帮助提升骨质的密度，从而减少因摔倒而出现骨折或骨裂的情况。

4. 支持及维持健康牙齿生长

牙齿主要是由钙质形成，为人体中最坚硬的组织。当身体缺乏钙质，便有机会反映在牙齿上，容易形成牙松，而这时候因为齿槽骨脆弱、萎缩，也会提高牙周病风险，甚至造成牙齿易脱落。



5. 加强肌肉协调力及肌肉神经网络

Aquamin® 经临床证实，有效提升关节灵活性，减少关节不适，以及维持健康骨骼组织。另外，配方含有镁、钾、钙，帮助肌肉收缩和放松，或有助增加肌肉协调力及减少抽筋。

6. 适合关注甲状腺健康人士使用

副甲状腺损伤或功能受损的人士，会导致暂时性或永久性的血钙低。副甲状腺在颈部的甲状腺的后面，副甲状腺主要分泌副甲状腺素（parathyroid hormone，PTH），而副甲状腺素的作用就是管理钙和磷代谢的重要激素，可以促进骨的吸收、维持一定的血钙浓度、增加钙在肠道内的吸收和减少钙从体内的流失。简而言之，PTH 可以使人体的血钙保持在一定的水平，维持人体正常的钙和磷代谢过程。



7. 或有助于稳定血压

钙可以调节细胞活动，是细胞的信号分子。血液中的钙浓度发生变化会影响平滑肌细胞的收缩功能，从而改变血管阻力。此外，钾亦可以维持心肌正常功能，对保护血管有一定的作用。

* 此产品没有根据《药剂业及毒药条例》或《中医药条例》注册。为此产品作出的任何声称亦没有为进行该等注册而接受评核。此产品并不供作诊断、治疗或预防任何疾病之用。

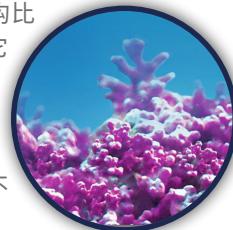
超级骨骼健的独特性

I. 符合人体每次最佳补钙进食份量

人体一次不能摄取大于 500 毫克剂量的钙片，摄取大于 500 毫克的剂量时，吸收率就会开始下降。所以每次一粒含有 400 毫克钙，适合人体每次的吸收份量。一般成年人每天建议摄取钙质剂量约为每天 1000 毫克，而一般我们的日常饮食也会摄取到少量钙质，因此，每天食用份量二粒的超级骨骼健已可满足大部份人士每日所需。

2. 纯天然植物钙，吸收比碳酸钙高 45%

Aquamin® 是市面上罕见高生物吸收率及运用率的植物钙，它的结构比一般合成钙质有更高活性，是纯天然微细份子结构。研究显示，它比市面上传统常见的钙质补充品（碳酸钙）多 45% 的吸收率，亦不会引致胃气胀和便秘，减少对身体造成负担，使我们更易及安全地达到每日钙质所需。而且，市面上有很多钙片都是人工或是使用乳制品合成。由于这个配方是萃取自天然藻类植物，所以有乳糖不耐症或对牛奶敏感的人士都适合使用。



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3. Osteobalance 配方，补骨锁钙同时护心

Osteobalance 专有配方特别加入两种帮助钙质吸收的维生素 K2(MK-7) 和 D3。研究指出，摄取钙质时配合维生素 K2(MK-7) 和 D3 和其他微量元素能令钙质更加容易直达骨骼中。加入维生素 D3，能有效将钙质带到血液中；加上维生素 K2(MK-7) 成份，再能把钙质更有效透过血液传送到骨骼，同时清理血管中剩余的钙质，防止血管钙化和硬化。

参考数据：

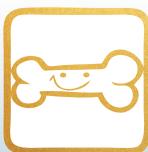
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4. 强化骨骼亦强化肌肉，更全面保护整体骨骼系统

骨骼系统除了骨头保护之外，其实亦需要肌肉的保护，才可提供稳固的支撑。因此，于选择骨骼补充品时，配方应要加强到肌肉的协调力之外，亦不应该增加身体负担，如：胃气、便秘、血管钙化等的风险因素。因此，超级骨骼健所含的各种成份配合，就是您更全面的补钙选择！

THE 7 MAIN BENEFITS OF SUPABONE

1. Helps in preventing arterial calcification during calcium supplementations, aids in bone and heart health
2. Protects bones
3. Contains multi-minerals that helps in strengthening the bones
4. Supports and maintains healthy teeth growth
5. Strengthens muscle coordination and neurons system
6. Suitable for people who concern thyroid health
7. May assist in stabilizing blood pressure



* This product is not registered under the Pharmacy and Poisons Ordinance or the Chinese Medicine Ordinance. Any claim made for it has not been subject to evaluation for such registration. This product is not intended to diagnose, treat or prevent any disease.

WHAT IS SKELETAL SYSTEM?

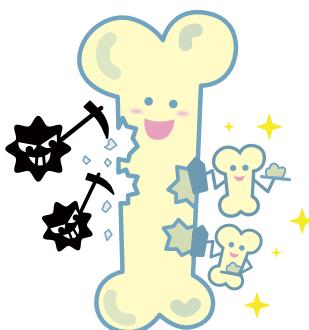
The skeletal system serves as a framework of the body. Not only just to support the body's physical movements, it also helps to protect the body organs, produces red and white blood cells, and it helps in storing minerals (e.g. calcium, magnesium, and phosphorus).

Our bones create new bone tissue every day while they also break down and replace the old bone tissue. Besides, our body will extract the nutrients from the bones to maintain the normal operation of other organs. It takes 10 years for the skeleton to complete a repair cycle. Due to a different metabolic rate in the body, old and new bones will always exist at the same time. By the middle age, the skeletal renewal rate will slow down, and our bone density will become lower, which is the reason of increasing the risk of osteoporosis. Therefore, we must ensure that our bones have adequate nutrients to maintain their needs.



Osteoclasts

When blood calcium is low, osteoclasts will decompose the bones and release calcium into the bloodstream.



Osteoblast

When the calcium concentration in the blood is high, osteoblasts will take calcium in the blood to the bones

Amongst all of the nutrients, calcium is the most abundant minerals found in bones. About 99% of the calcium is stored within the bones and teeth, and the remaining 1% of calcium is distributed in various organs and tissues in the human body. A small amount of calcium is enough to maintain numerous important ions responsible for nerve conduction and muscle contraction in the body. Therefore, the balance of calcium is very important for maintaining good health. A slight calcium deficiency would weaken the skeletal system.

WHAT HAPPENS TO THE BODY WHEN THE BONES BEGIN TO WEAKEN?

- Osteoporosis
- Back pain, kyphosis
- Loosing teeth
- Brittle nails
- Weakening muscles and limited movement



- Prone to muscle cramps
- Decreases in height every year
- Difficulty in breathing
- Cardiovascular obstruction
- Affects sleeping quality
- Emotional

RISK FACTORS FOR BONE LOSS?

IMPROPER EATING HABITS

Regular intake of alcohol, caffeine, carbonated drinks, sweets, strong flavor and high protein may lead to high production of phosphorus in the blood, which can affect the body's absorption of minerals and thus accelerate the release of bone calcium into the blood stream, causing bone loss.

PEOPLE WITH LACTOSE INTOLERANCE

The calcium supplementation pathway that most people know is based on the intake of dairy products, yet the lactose contained in dairy products may not be suitable to everyone. About half of the global population lacks of the enzymes that helps to break down lactose in the small intestine. As we age, the amount of lactase in the body will gradually decrease. Therefore, when people consume dairy products, the intestine will be affected, causing abdominal distention, diarrhea, intestinal pain and other symptoms. People in these categories are more likely to suffer from intestinal discomfort, which limits the intake of calcium, increasing the chances of bone loss.



PEOPLE WITHOUT REGULAR PHYSICAL ACTIVITIES

According to World Health Organization, 1 in every 4 people in the world do not have a regular habit of physical. Exercising could help strengthen osteoblast and boost blood circulation in bone tissues, which is able to stimulate bone density. Weight-bearing exercise could train up muscle endurance, increase joint flexibility and improve body coordination, preventing from bone fracture following a fall.

PEOPLE WITH LESS THAN 30 MINUTES OF SUN EXPOSURE PER DAY

Sunlight could stimulate the body to produce vitamin D. Vitamin D could facilitate calcium absorption and is an essential element for stronger bones. According to clinical research, 51% of school-age children and adolescents are vitamin D deficient, while 90.3% are vitamin D inadequate. People who do not work under the Sun or frequently apply sunscreen are more likely to lack in vitamin D, accelerating their rate of bone loss.



PEOPLE WITH POOR THYROID HEALTH

Thyroid is a body organ that regulates metabolism. While parathyroid is located behind the thyroid, which regulates the metabolism of calcium and phosphorus. It can stimulate bone to release calcium, as well as stimulate calcium absorption in the intestines and monitor calcium loss, so as to maintain the balance of blood calcium. Therefore, people with parathyroid diseases have higher risks for increase bone loss.

PEOPLE WHO ARE ON CHRONIC MEDICATION

Busy urban life have led to chronic stomach diseases in many people. However, frequent use of aluminum-containing antacid will decrease stomach acid, which may affect the absorption of calcium and other minerals that benefit to bone health. Steroid drugs may also affect the function of parathyroid, increasing calcium loss.



MENOPAUSE

As women reach menopause, the ovaries release fewer female hormones due to slower ovary function, which increases rate of bone loss. According to The Osteoporosis Society of Hong Kong, the period of peak bone loss occurs in the first 10 years after menopause.

AGE

Bones change in shape and size with aging. During childhood and teenage, bone density increases rapidly and reaches peak level at around the age of 30. After 40, the activity of osteoblasts decreases, while the activity of osteoclasts increases, resulting in decreasing bone density.



TOXINS ACCUMULATION- HEAVY METALS

Heavy metals are one of the environmental contaminants, which can enter body through water, food or air, damaging it chronically. Researches have suggested that lead and cadmium are related with low bone density¹. Cadmium can be found in seafood, cigarette smoke or even second-hand smoke, which could affect metabolism of bone calcium under long-term accumulation. Lead can be found in unfiltered water or traditional Chinese medicine medication. Lead could inhibit absorption of minerals that benefit bone health, such as calcium and zinc, thus weakening bone tissues.

Reference:

Lim, H. S., Lee, H. H., Kim, T. H., & Lee, B. R. (2016). Relationship between heavy metal exposure and bone mineral density in Korean adult. Journal of bone metabolism, 23(4), 223-231.d

DNA

Peak bone mass is to a great extent genetically determined. The vitamin D receptor (VDR) gene accounts for around 70% of the entire genetic influence on bone density, playing an important role in calcium homeostasis, bone cell growth and differentiation, and intestinal calcium absorption.



HOW TO IMPROVE AND STRENGTHEN OUR BONE HEALTH?

As human cannot synthesize and generate minerals by ourselves, we need to ensure we have sufficient intake of minerals every day.



MAINTAIN A HEALTHY DIET

We need to absorb enough minerals no matter in which stages of life. We must maintain a daily intake of different calcium-rich foods from the diet, such as hard tofu, almonds, black beans, sesame seeds, broccoli and sardines to meet our physical needs. Although these food sources have lower calcium amount than dairy products, the irritation to the intestines is greatly reduced, and people with lactose intolerance can have more choices for additional sources of calcium intake. Consuming more non-genetic modified soybeans and non-hormone-containing poultry can also help reduce the adverse effects of estrogen intake from the diet and reduce the impact on homeostasis.

REGULAR AND MODERATE EXERCISE WITH SUN EXPOSURE

Exercise, particularly weight-bearing exercises such as squats and plank can help strengthen the endurance of osteoblasts in bones, promoting bone blood flow and stimulating bone quality and density. Moderate exercise can simultaneously train up our muscle endurance, improve the softness of joints, and improve the coordination of the body, which can help prevent from fractures caused by falling. It is advisable to do outdoor exercise at least 20 minutes a day, to strengthen both muscles and bones, and also allow the skin to receive sunlight, increase its own synthesis of vitamin D, and to help calcium absorption.



MAINTAIN A GOOD QUALITY OF SLEEP, KEEP GOOD HOURS

To maintain a good quality of sleep and keeping good hour, an adult should have about 7 to 8 hours sleep every day. The best bed time is between 9pm to 6am. During deep sleep, our body releases growth hormones that stimulate bone growth. Therefore, sufficient sleep can maximize the function of the skeletal system.

DETOXIFICATION

Nowadays, exposure to toxins is unavoidable. Accumulation of toxins, such as heavy metals, makes our skeletal system more likely to lose nutrients. Therefore, regular detoxification can accelerate the removal of toxins from the body and intestines. A clean, toxin-free body can promote skeletal system to function optimally.

UNDERSTAND THE POTENTIAL RISKS FROM YOUR GENES

Nearly majority of illness are related to genetic mutations. Although we cannot change or modify our genes, through genetic test, we will be able to know more about the potential risks from our genes and understand our own specific diet and lifestyle recommendations, reducing our risk of illness.

STEM CELL

Skeletal synthesis also requires help from stem cells in our body. In fact, our stem cells will decrease and age with time and become more difficult to regenerate. Nowadays, science technology can extract stem cells from autologous fat and by using advanced techniques to induce these stem cells to become skeletal stem cells, which helps to slow down the aging process of the skeletal system.

USE SUPPLEMENTS TO STRENGTHEN THE SKELETAL SYSTEM

Based on the study "Hong Kong's first total dietary study-minerals" released by the Hong Kong Food Safety Centre last year, it was found that the mineral content of most of the foods has fallen compared with the food nutrition information updated on the Food Safety Centre website in 2014. For example the calcium content in a chicken thigh meat (lean meat) has been dropped by 48%. Research in the United States also found that the vitamin and mineral content in fruits has also fallen by 25% to 50% in the past decade. Since our body cannot synthesize nutrients to maintain a healthy skeletal system, it is gradually becoming difficult to obtain all necessary nutrients from a normal diet to meet the daily needs today. Therefore, taking supplementation is essential. The latest scientific research also shows that apart from calcium, vitamins D3, K2, magnesium and zinc are all beneficial to the skeletal system as well.

WHAT IS THE DAILY INTAKE OF CALCIUM? WHAT IS THE EQUIVALENT AMOUNT OF HIGH CALCIUM FOODS?

	*Whole milk (cup)	Cooked cabbage (bowl)	Cooked kale (bowl)	Cooked broccoli (bowl)	Hard bean curd (100g)
High source of calcium food					
Calcium intake (mg)					
	291 mg	158 mg	94 mg	72 mg	320 mg
Daily calcium intake (mg)					
Children and adolescents (1300 mg)	4.46 cup	8.2 cup	3.8 cup	18 cup	400g
People between 20 to 59 years old (1000 mg)	3.43 cup	6.3 cup	10.6 cup	13.8 cup	310g
Pregnant women (1300 mg)	4.46 cup	8.2 cup	13.8 cup	18 cup	400g
People between 60 to 84 years old (1000 mg)	4.46 cup	8.2 cup	13.8 cup	18 cup	400g

*Note: Not a suitable source of calcium supplementation for people with lactose intolerance

From the above calculations, we can see that the number of servings we need would be massive if we would like to meet the daily calcium requirement from daily foods. At the same time, the calories intake would be increased as well, making this not the healthiest calcium intake options. Therefore, it becomes more sensible to choose a high quality functional supplement.

Source of Origin: World Health Organization, Centre for Food Safety and Hong Kong Department of Health

WHAT IS SUPABONE ?

SUPABONE is extracted from pure natural algae and is a brand new functional calcium supplement. It has a unique compound formula that allows a better nutrients absorption and recognition by our body, due to the synergistic effect brought by the combined ingredients. SUPABONE is a special and better form of bone health supplement compared to others. In addition, it provides us the necessary nutrients for our bone. One tablet of SUPABONE contains 400mg of calcium, which is a suitable amount for human body absorption. Two tablets per day will provide the daily needs for most people.



SUPABONE Main Ingredients:

Aquamin® Calcium

Aquamin® Magnesium

OSTEOBALANCE - A blend formula of Potassium,

Zinc, Boron ,Vitamin D3, Vitamin K2 (MK-7)

EXCELLENT EFFICACY OF INGREDIENTS

AQUAMIN® CALCIUM

Aquamin® is an algae calcium extracted from the pure, pollution-free sea in Northern Europe, it is rich in calcium. Indeed, in the human body, about 99% of the calcium is stored in bones and teeth, and the remaining 1% of calcium is distributed in various organs and tissues in the human body. Calcium is extremely important to build the structure of bone and support the metabolism in our whole body, such as blood clotting, helping with neurotransmitters, coordinating muscle contraction and relaxation.



AQUAMIN® MAGNESIUM

Apart from calcium, Aquamin® is also rich in magnesium. Magnesium is also one of the main elements that build bone structure. About 70% of magnesium in our body is stored in bones, which combine with calcium to bring a synergistic effect to strengthen the absorption of calcium, so as to maintain the health of bones, and helps prevent from losing bone density. In our body, Magnesium also acts as a vital role in physiological functions, Magnesium involves in different mechanisms such as synthesis of DNA and proteins. Also, magnesium helps in maintaining the health of heart, muscles and nervous system. Magnesium is one of the essential macro-minerals, which helps reduce calcium depositing in the organs and arteries.

OSTEOBALANCE - A BLEND FORMULA OF POTASSIUM, ZINC, BORON, VITAMIN D3,VITAMIN K2 (MK-7):



I. POTASSIUM

Potassium is one of the seven essential macro-minerals that every cell needs it to deal with their functions. The primary functions of potassium in the body include regulating fluid balance, controlling the electrical activity of the heart and muscle contractions, and nerve impulses. Therefore, without enough potassium, the nerves and muscles including heart may not work properly. Adequate potassium intake also helps maintain bone mineral density and reduce the risk of losing bone mass.

2. ZINC

Zinc is one of the essential minerals that maintains human metabolism. 90% of zinc is stored in muscle and bone. The major functions of zinc include muscle contraction and relaxation, as well as maintaining the strength of immune system. Many studies found that taking calcium, magnesium, zinc and vitamin D together can help maintain a better bone health.

3. BORON

Boron is an essential micro mineral, naturally found in many vegetables and fruits and rarely found in animals, including almonds, peanuts, hazelnuts, dates, dried plums, raisins, soybeans, wine and honey. Boron is vital to bone health and growth and latest research discovered that boron can enhance the absorption and metabolism of calcium, magnesium and potassium. Thus, it can maintain the bone density and boost up the recovery of bone fracture.



4.VITAMIN D3

Vitamin D, also called Sunshine Vitamin. It can be synthesized in the skin through a chemical reaction that is dependent on sun exposure, specifically UVB radiation. The ability of synthesis of vitamin D declines with the age. Elderly people and sun-deprived group have a higher chance to become vitamin D deficiency.

Vitamin D is essential for our body metabolism; it does not only help in calcium absorption and adjusting the concentration of calcium in blood, but also increase the absorption of minerals into the bone, thereby strengthen the bone development and growth. Also, Vitamin D helps maintain neural, muscular system health, as well as muscles' strength, reducing the chance of getting bone fracture following a fall.



5. VITAMIN K2 (MK-7)

Vitamin K2 plays a key role in production of both coagulation and anticoagulation, and it is necessary for blood clot. An excess intake of Vitamin K2 does not lead to blood clot. Formulated with vitamin K2 (MK-7) extracted from natto, its main function is to prevent calcium from being deposited in arteries. If calcium is deposited in arteries, the risk of heart disease will increase. By providing the body with vitamin K2 (MK-7), it helps remove calcium from the blood and transfer calcium to the right place in the bone and teeth.

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THE BENEFITS OF SUPABONE

1. HELPS IN PREVENTING ARTERIAL CALCIFICATION DURING CALCIUM SUPPLEMENTATIONS, AIDS IN BONE AND HEART HEALTH

The main effect of osteocalcin produced by skeletal osteoblasts is to introduce calcium from the blood into the bones that helps the bones to rebuild and grow. Vitamin K2 can activate osteocalcin to prevent calcium deposition in the arteries, thus preventing arteriosclerosis and heart disease. At the same time, it helps calcium to be imported and combined into the bone, hence strengthening the bones and reducing the risk of fracture. Therefore, in order to maintain healthy teeth and bones, as well as a strong, healthy cardiovascular system, vitamin K2(MK-7) is indispensable.

2. PROTECTS BONES

Aquamin® is a natural calcium extracted from algae. Compare to similar plant-derived calcium sources, Aquamin® has the highest calcium absorption rate due to its high biological activity. Together with other minerals, it helps to enhance calcium absorption and utilisation, giving the bones adequate capacity to support the body's weight.



3. CONTAINS MULTI-MINERALS THAT HELP IN STRENGTHENING THE BONES

Rich in calcium, magnesium and the unique OSTEOBALANCE blend. These algae absorb important mineral elements from the ocean that have a unique multi-mineral content, and are excellent sources of calcium supplementation. Sufficient calcium can fill gaps in bones and helps increase the density of the bone, thereby reducing bone fractures caused by falling.

4. SUPPORTS AND MAINTAINS HEALTHY TEETH GROWTH

The teeth are mainly formed by calcium and are the hardest tissues in the human body. Lack of calcium in body can be reflected on the teeth, and it is easy to form loose bone. At this time, since the alveolar bone is fragile and atrophic, it will also increase the risk of periodontal disease, and even cause the teeth to loose and fall off.

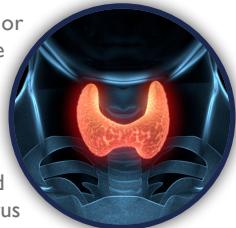


5. STRENGTHENS MUSCLE COORDINATION AND NEURONS SYSTEM

Aquamin® has been clinically proven to helps increase in joint flexibility, reduce joint discomfort, and maintain healthy bone tissue. In addition, the formula contains magnesium, potassium, calcium, helps muscle contraction and relaxation, and helps increase muscle coordination and reduces cramps.

6. SUITABLE FOR PEOPLE WHO CONCERN THYROID HEALTH

People with parathyroid damage or impaired function may cause temporary or permanent hypocalcemia. The parathyroid gland is behind the thyroid gland in the neck. The parathyroid gland secretes mainly parathyroid hormone (PTH). The role of parathyroid hormone is to administer important hormones for calcium and phosphorus metabolism. It can promote bone absorption, maintain blood calcium concentration, increase the absorption of calcium in the intestine and reduce the loss of calcium from the body. In short, PTH can keep the body's blood calcium at a certain level and maintain the body's normal calcium and phosphorus metabolism.



If PTH secretion is reduced, the blood calcium concentration cannot be maintained, which can lead to a series of symptoms caused by low calcium, such as cramps, paralysis of hands and feet. From here we see that to tackle hypocalcemia, we must first maintain the balance of PTH, and the calcium, vitamin D and vitamin K2(MK-7) contained in the SUPABONE helps provide the nutrients needed for PTH and thus improve bone health.

7. MAY ASSIST IN STABILIZING BLOOD PRESSURE

Calcium regulates cell activity and is a signal molecule for cells. Changes in the calcium concentration in the blood may affect the function of many cells, including the contractile function of vascular smooth muscle cells that play an important role in the formation of vascular resistance. Due to calcium deficiency, the calcium balance in and out of the cell may change, causing an increase in a systemic resistance vasoconstriction of the smooth muscle cells. In addition, potassium can also maintain the normal function of myocardium and have a certain effect on the protection of blood vessels.

* This product is not registered under the Pharmacy and Poisons Ordinance or the Chinese Medicine Ordinance. Any claim made for it has not been subject to evaluation for such registration. This product is not intended to diagnose, treat or prevent any disease.

UNIQUENESS OF SUPABONE

I. THE BEST CALCIUM AMOUNT FOR BODY ABSORPTION PER SERVING

The calcium absorption rate of human body will begin to drop when the dosage is more than 500 mg. Therefore, each capsule containing 400 mg of calcium is suitable for human body absorption per serving. As the recommended daily calcium intake for adults is about 1,000 milligrams, and our diet normally includes certain amount of calcium, two capsules daily is adequate to meet the needs for most people.

2. NATURAL PLANT SOURCE FOR CALCIUM. CALCIUM ABSORPTION RATE IN AQUAMIN® IS 45 % HIGHER THAN THAT OF CALCIUM CARBONATE

Aquamin® is a plant source of calcium that is rare in the market for its high bio-absorption rate and utilization rate. Its structure is more active than normal synthetic calcium, and it has a pure natural microelement structure. Some researches reveal that pure natural Aquamin® has a 45% higher calcium absorption rate than traditional calcium supplement (usually calcium carbonate), and does not cause bloating and constipation and does not burden the body. Therefore, SUPABONE can meet our calcium recommended intake easily and safely. Also, there are many calcium tablets on the market that are artificial or synthesized using dairy products. As this formula is extracted from natural algae, it can be used by anyone, even if they have lactose intolerance or are allergic to dairy products.



Reference:

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3. OSTEOBALANCE FORMULA AIDS IN BONE AND HEART HEALTH WITHOUT ARTERIAL CALCIFICATION

Osteobalance formula is specifically added with Vitamin K2 (MK-7) and D3 that can help calcium absorption. Studies show that calcium can be more easily absorbed with vitamin K2 (MK-7), D3 and other trace elements. By adding vitamin D3, it can effectively bring calcium into the blood. With the vitamin K2 (MK-7), calcium can be transported through the blood to the bones. At the same time, the remaining calcium in the blood vessels can be cleared to prevent calcification and hardening of blood vessels.

Reference

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4. STRENGTHENS THE BONE AND MUSCLE, AND PROTECTS COMPREHENSIVELY THE OVERALL SKELETAL SYSTEM

In addition to bone protection, the skeletal system also requires muscle protection to provide a firm support. Therefore, when selecting bone supplements, the formula should be strengthened beyond the coordination of muscles, and should not increase the burden on the body, such as stomach discomfort, constipation, vascular calcification and other risk factors. Therefore, the combination of various ingredients in SUBABONE is your more comprehensive calcium supplementation selection!



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