

# Bone & Joint Care Solution

# Whole Ingredient Solution



Absorption of Calcium and phosphorus  
Facilitate bone calcification

**Bone Health**

- Ensure cartilage cells enough moisture to buffer vibration
- Motivate cartilage's supersession and regeneration

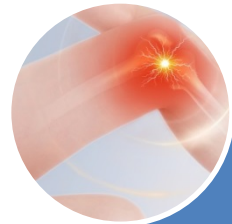


**Cartilage Repair**



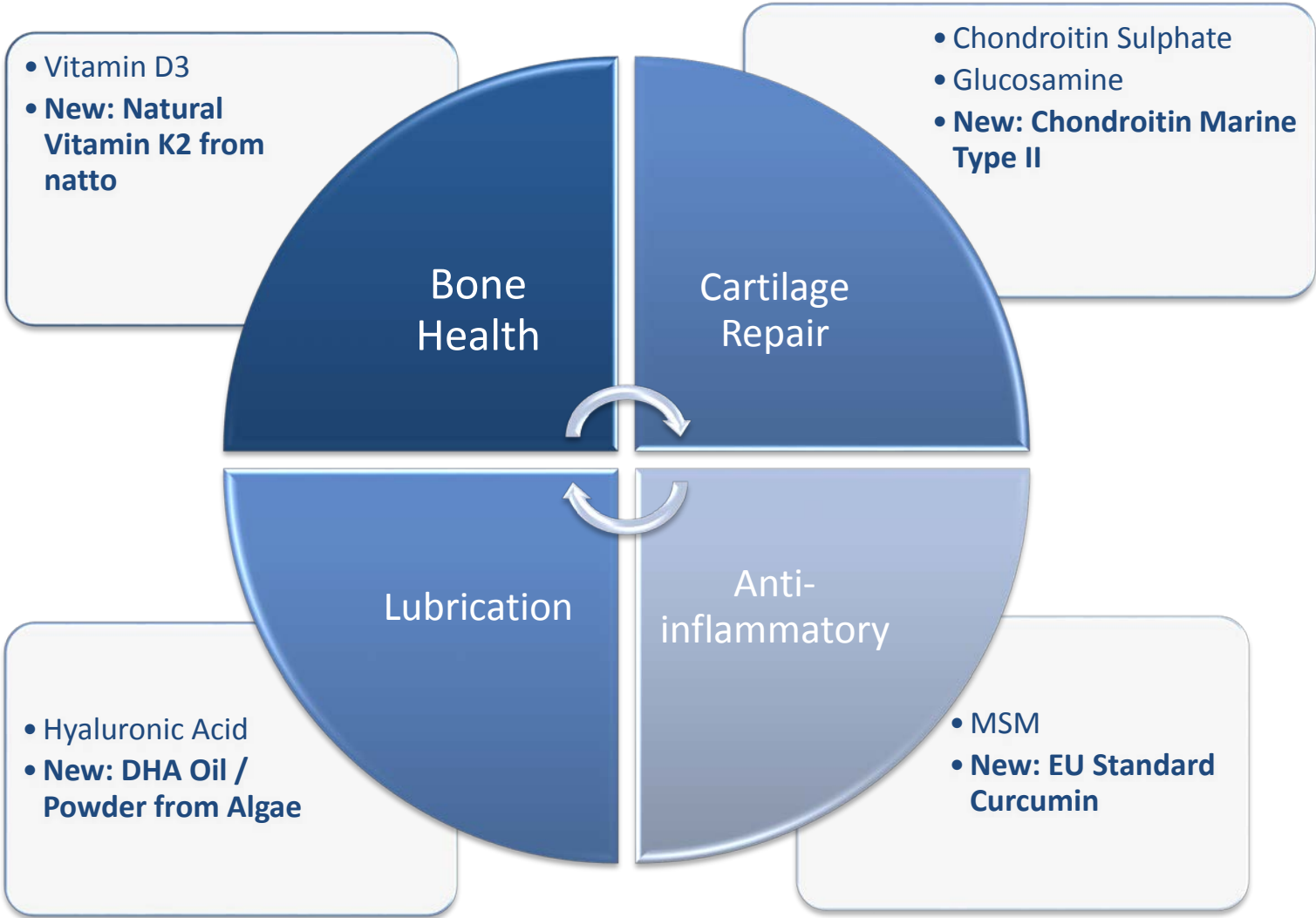
**Lubrication**

Provide excellent support on help restore mobility, flexibility and comfort to move with ease



**Anti-inflammatory**

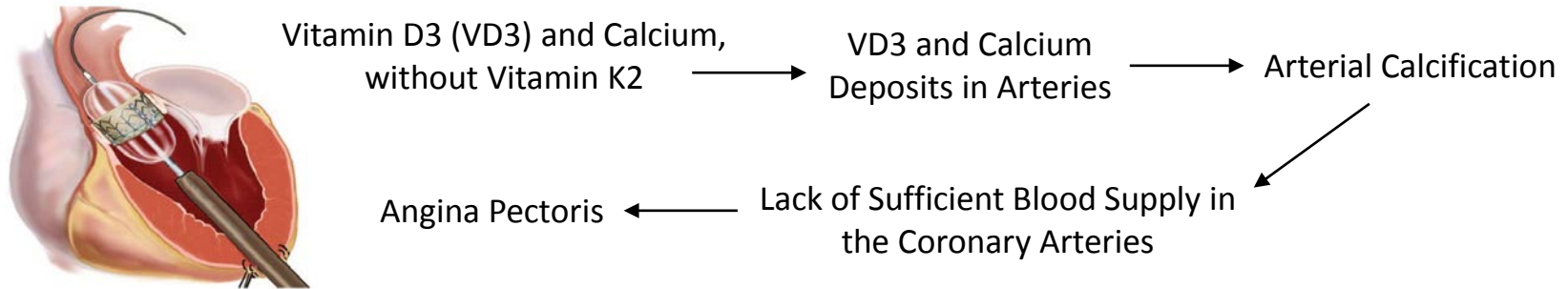
# Whole Ingredient Solution



# Bone Health Solution

Product	Specification	Advantage
Vitamin D3	VD3 100,000IU/g CWS Powder	<ol style="list-style-type: none"> <li>1. Whole solution from powder, oil to softgel</li> <li>2. Excellent Water Disability and safety performance</li> <li>3. Excellent stability with 3 years shelf life</li> </ol>
	VD3 500,000IU/g CWS Powder	
	VD3 Softgel	
Vitamin K2	Natural VK2 0.1% Powder	<ol style="list-style-type: none"> <li>1. Natural quality from fermentation</li> <li>2. All-trans Vitamin K2 without preservative, additive and GMO</li> </ol>
	Natural VK2 0.2% Powder	
	Natural VK2 0.45% Powder	

## Why Natural VK2: Adverse Health Effects Caused by Excessive Intake by Vitamin D3 and Calcium, but without taking Vitamin K2



# Cartilage Repair Solution

Product	Source	Specification
Chondroitin Sulphate	Terrestrial	CS Bovine, Porcine, Avian
	Marine	CS Marine, Marine Type II
	Shark	CS Shark
Glucosamine	Animal / Fermentation	D-Glucosamine Sulphate 2KCL Powder / Granular
	Animal / Fermentation	D-Glucosamine HCL
	Fermentation	N-Acetyl D-Glucosamine

## Chondroitin Sulphate Marine Type II

Grade	Specific Rotation	4s/6s Ratio	Molecular Weight
Chondroitin Sulphate Marine Type II	-12°~ -19°	0.8 ~ 1.5	MWw no more than 80,000 Dispersity (MWw / MWn) NLT 2



- **Specific fish species to make CS Marine Type II**
- **Able to meet with both EP and Volpi standard**

# Anti-inflammatory Solution

Product	Specification	Advantage
Curcumin	Root Powder	On-scene control on raw material C14 test / Pesticide / Residual Solvent test with EU standard
	95% Extract Powder / Granular	
	5% - 10% CWS Powder, Oil	
MSM	60 – 80 mesh Powder	

## Why Our Curcumin?

### Raw Material

- On-scene control of farmland on raw material's pesticide
- Raw material from India with better cost



### Quality

- C14 test to justify natural quality
- Pesticide Residue complied to EC 396
- Residual Solvents complied to EC 2009/32

### Manufacturer Certification

- cGMP certified manufacturer
- BRC certified
- ISO 9001 / 22000 / Kosher / Halal certified



# Joint Lubrication Solution

Product	Specification	Advantage
<b>Hyaluronic Acid</b>	High M.W $\geq 2.0 \times 10^6$	<ol style="list-style-type: none"><li>1. Capability on food grade, pharmaceutical grade and cosmetic grade</li><li>2. Value-added services including global sourcing, tailored solutions, custom-made production and efficient logistics</li></ol>
	Ordinary M.W $(0.80 \sim 1.80) \times 10^6$	
	Low M.W 8,000~50,000	
<b>Vegan DHA</b>	35% - 45% Oil 7% - 11% Powder	<ol style="list-style-type: none"><li>1. Patented Continuous Inductive Mutation (NON-GMO)</li><li>2. Great safety performance with plant source, free from glucose, sucrose, lactose, sugar control</li><li>3. Free from protein ingredients with no allergen</li></ol>



## Why Our DHA?

- Vegan Source to satisfy vegetarian
- Low sugar, safe, allergen free, organic available
- A whole solution with powder, oil, capsule available

# Is Vegan Solution possible in Joint Nutrition?

## Why We Suggest Vegan Solution:

- Regulation Concern
- More Sustainable
- Stable Production Capacity
- Stable Cost Performance
- Less Environmental Issues
- Suitable for vegetarians and vegans

APPROVED

DECLINED



Pro

Innovative Solution  
Strong Technique & Data Support



# What We Suggest:



**New Anti-Inflammatory Solution  
- Curcumin**

**New Lubricant Solution  
- Low Molecular Hyaluronic Acid**

**New Solution of Arterial Calcification  
- Vitamin D3 + Natural Vitamin K2**

## **Vegan Solution:**

- ◆ **Turmeric / Curcumin**
- ◆ **Vegan Glucosamine**
- ◆ **Hyaluronic Acid**
- ◆ **Vegan DHA**

Pro

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# Public Research:

Glucosamine + Curcumin against Glucosamine + Chondroitin  
(From Meriva treatment group):

- Pain scores for OA symptoms decreased by more than 50%
- Walking distance on the treadmill test increased 3-fold

- [Chris Poorten](#), Nutritional Advisor from USANA



Innovative Solution  
Strong Technique & Data Support

# What We Have:

## Hyaluronic Acid:

- High M.W  $\geq 2.0 \times 10^6$
- Ordinary M.W  $(0.80 \sim 1.80) \times 10^6$
- Low M.W 8,000~50,000

## Curcumin:

- Turmeric Root Powder
- Curcumin 5% Extract Powder
- Curcumin 40% Extract Powder
- Curcumin 95% Extract Powder
- Curcumin Water Soluble Powder
- Curcumin Granular

## DHA:

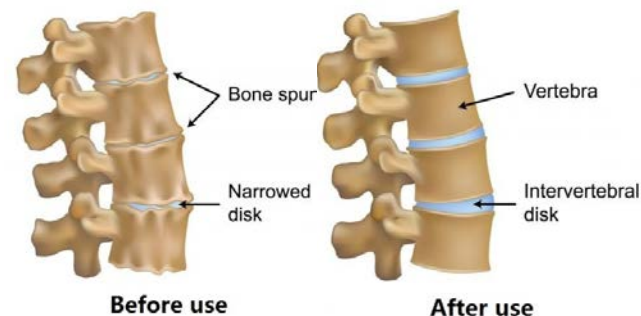
- DHA 35% - 45% Oil
- DHA 7% - 11% Powder

## Vega Glucosamine:

- D-Glucosamine Sulphate 2KCL
- D-Glucosamine HCL
- D-Glucosamine Sulphate 2NACL
- **N-Acetyl D-Glucosamine** ★

## Why We Suggest NAG:

- 6 times more efficient than traditional glucosamine
- increases production of hyaluronic acid at epidermis and corium





Thank you!