

Sustainably sourced
From fully traceable Atlantic Salmon

240mg/day
Convenient dosage form with meals

Bone health
Clinically proven to increase bone mineral density in women >50yrs with osteopenia

Triple helix form of collagen
Proven ingredient to induce immune tolerance for joint inflammation

Clinically proven
62.7% reduction in WOMAC over 6 months (joint pain, stiffness & function)

NT-II™
Joint Health & Mobility

100% natural
No processing, no purification 6x more absorbable than calcium carbonate

Undenatured type II collagen

Joint health

Natural Undenatured Type II Collagen

The natural joint health solution to sustain improved joint mobility and bone health

Where is the Innovation?

- ✓ **NT-II™ Undenatured Type II Collagen: Comprehensive In Vitro Characterization of Bioaccessibility, Epitope Integrity, and Collagen Typing** – peer reviewed paper demonstrating bioequivalence to UC-II®, now from salmon
- ✓ **Proven natural ingredient with to induce immune tolerance & alleviate joint inflammation**
- ✓ No processing or purification, whole food nutrition
- ✓ **Provides for innovation in different dosage forms – liquids and gummies now possible**
- ✓ 3 published clinical studies demonstrating **inflammation reduction, improvements in bone mineral density and higher absorption**

What Is NT-II™

- NT-II™ is a completely natural product, rich in **undenatured type-II collagen**
- **>19% natural (undenatured) type II collagen**
- **>19% calcium hydroxyapatite**
- Rich in trace minerals like **phosphorous (>9%)** and **zinc**
- The natural undenatured type II collagen is contained and protected in a **natural calcium hydroxyapatite** scaffold, protecting it from higher temperatures and allowing to be turned into liquids and gummies
- Supporting **joint health** to help maintain and improve activity levels including daily step targets which are essential for healthy aging
- **Fully circular economic business model where 100% of the salmon is utilized**

NT-II™ : Specification example

Parameter	Specification	Unit	Method
Color	Off-white		Visual
Structure	Powder		Sensory test
Solubility	Insoluble in water		Sensory test
Moisture	< 5.00	%	Gravimetry
Density – tapped	0.7 – 0.9	gm/cc	European Pharmacopeia Chapter 2.9.34
Density – untapped	0.5 – 0.7	gm/cc	European Pharmacopeia Chapter 2.9.34
Total Collagen	25.0 – 31.0	%	ISO 13903:2005
Natural Type II (undenatured) Collagen	19.5 – 24.2	%	ISO 13903:2005
Calcium	190 000 – 230 000	mg/kg	DS/EN 13805:2014, DS/EN ISO 11885m:2009
Phosphorus	90 000 – 120 000	mg/kg	DS/EN 13805:2014, DS/EN ISO 11885m:2009
Zinc	190 - 290	mg/kg	DS/EN 13805:2014, DS/EN ISO 17294m:2016
Total Aerobic Plate Count	< 10 000	CFU/g	AFNOR 3M 01/01-09/89
Enterobacteriaceae	< 10	CFU/g	AFNOR 3M 01/06-09/97
<i>Listeria monocytogenes</i>	Not detected/25 g		AFNOR 3M 01/15-09/16
<i>Salmonella spp.</i>	Not detected/25 g		AFNOR 3M 01/16-11/16
Coagulase-positive Staphylococci	< 10	CFU/g	AFNOR BKR 23/10-12/15
Mold	< 100	CFU/g	AFNOR 3M 01/13-07/14
Yeast	< 100	CFU/g	AFNOR 3M 01/13-07/14
Arsenic (inorganic)	< 0.1	mg/kg	ASU L 25.06-1 (2008-12), mod.
Cadmium	< 0.10	mg/kg	DS/EN 13805m:2014, DS/EN ISO 17294m:2016
Lead	< 0.10	mg/kg	DS/EN 13805m:2014, DS/EN ISO 17294m:2016
Mercury	< 0.100	mg/kg	DS/EN 13805m:2014, DS/EN ISO 17294m:2016

OUR SCIENCE TEAM

Dr. Bomi Framroze
Chief Scientific Officer
Dr. Crawford Currie
Head of Medical R&D

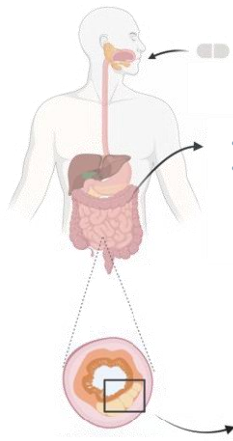


Learn more scan the QR

Classified as a New Dietary Ingredient by the US FDA
Qualifies for FDA Authorized Health Claims for osteoporosis



Mechanism of action for Immune Tolerance

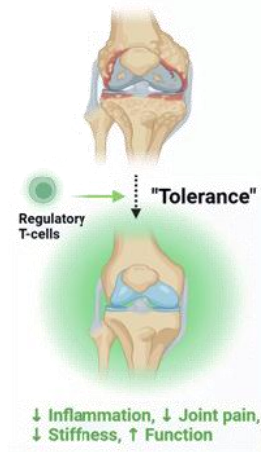
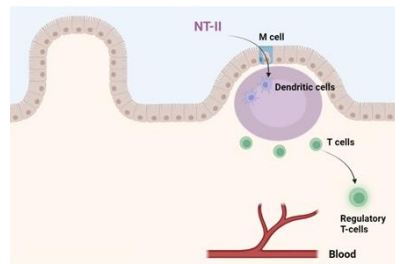


NT-II + Natural undenatured type II collagen (NT-II™) Gastrointestinal tract

- Houses 70% of the immune system by weight
- Exploit access to immune system to drive immune tolerance

Small intestine (cross section)

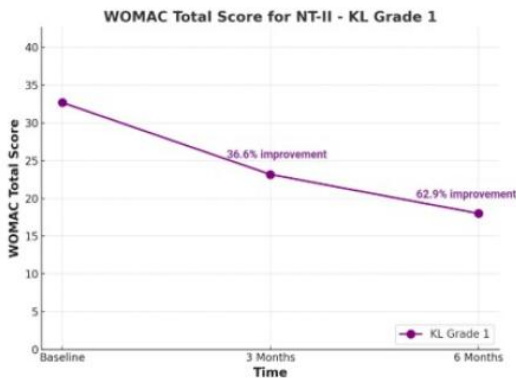
Collections of immune cells are found in the wall of the intestine, called **Peyer's patches**.



- NT-II™ is taken up by M cells into the **Peyer's patch**
- **Dendritic cells** recognize the soluble type II undenatured collagen as 'belonging to self' i.e. harmless
- Active dendritic cells drive the development of **regulatory T-cells** (cells that protect against immune overactivity)
- Regulatory T-Cells enter the bloodstream and reach the joints, where they instigate **anti-inflammatory effects** including the release of **IL-10 and TGF**
- This **reduces joint aches and stiffness** and sets up an environment for **healing**

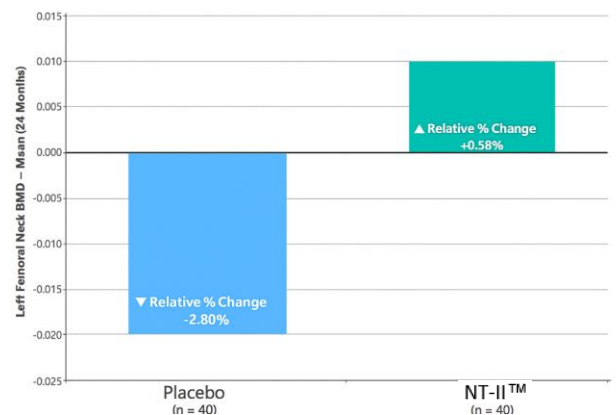
Joint Health Clinical Study:

A 6-month study was conducted on 26 subjects to assess the impact of 2g/day of NT-II™ on knee and hip pain and stiffness resulting from osteoarthritis (OA). The primary endpoint was WOMAC Osteoarthritis index, a highly validated self administered methodology.



Bone Mineral Density Clinical Study:


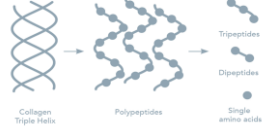
A two year study on 80 human subjects, 2g/day, >50years, female, with osteopenia. The primary end point the BMD in the femoral neck. Hip fractures have a 20–30% mortality rate within the first year.



- **NT-II halted age-related bone loss at the femoral neck** with statistically significant impact ($p = 0.017$).
- Participants in the **placebo group with Osteopenia, lost bone**, as expected with aging: a -2.8% decline in femoral neck BMD over 24 months.
- In contrast, the **NT-II group showed a gain: a +0.6% increase in BMD**, directionally opposite and statistically meaningful – a **+3.4% net BMD advantage vs. placebo**.
- In a context where bone loss is the norm, any net gain should be considered rare

Not all collagen options for Joint Health are the same

Natural or hydrolysed collagen supplement?

	Natural undenatured type II collagen (NT-II™)	Hydrolysed collagen peptides
Composition	Complex triple helix structure	Peptides only. No triple helix
Complex Structure	 Collagen triple helix structure 1.5 nm	 Hydrolysis of collagen destroys the triple helix and turns it into small peptides
Mode of action / end result	Immune tolerance leading to a direct reduction in joint inflammation relieving pain and stiffness and providing an ideal environment for healing.	Nutritional supplementation to supply amino acids to support new cartilage formation. However, ongoing inflammation is not an ideal environment for healing.