Welcome back to the vitaMK7® Pulse.

The second part 2015 is seeing Gnosis achieve strategic targets for the strengthening of vitaMK7® in global markets. The USP acknowledgment of Gnosis' proposal for Menaquinone-7 Monograph has had remarkable positive impact in the USA, Australia and has set the stage for the same reaction in Europe. Since August 1st the high quality of our Vitamin K2, vitaMK7® has even greater validation since the publication of the first USP monograph for the ingredient.

I am glad that this work has been recognized and I am proud of the role Gnosis had in proposing the most detailed and accurate specification and in supplying USP with the Vitamin K2 reference standard, which was produced under the most stringent cGMP procedures and was used for all of the quality control analyses required for the monograph.

Stay in touch,

Marco Berna
Business Development Director of Gnosis Group

USP ACKNOWLEDGES GNOSIS’ PROPOSAL FOR MENAQUINONE-7 MONOGRAPH

The first Official Compendia Monograph of Dietary Supplement for Vitamin K2 as menaquinone-7 (MK-7), published in USP 38-NF33 First Supplement, effective from August 1st, 2015, defines high quality standards for an optimal Vitamin K2 ingredient, made up of *Bacillus subtilis* natto extract of Menaquinone-7 obtained with CO₂ supercritical extraction.

The monograph defines the totally natural origin of Vitamin K2 as MK7 and claiming “IT CONTAINS NO ORGANIC SOLVENTS”, guaranteeing a production process that DOES NOT USE CHEMICALS OR SOLVENTS, this is Gnosis' vitaMK7®.

AUSTRALIAN AUTHORITY TGA RECOGNIZES THE USP MENAQUINONE-7 MONOGRAPH

The Australian Health Authority TGA (Therapeutic Goods Administration) has recently recognized the USP Menaquinone-7 monograph for the Australian market.

TGA published a note where it has declared that its proposed revision of the compositional guideline for 'Menaquinone 7' will no longer proceed since the USP-NF monograph for 'Menaquinone-7' provides the relevant guidance of the quality expected.
Recent research indicates that taking just vitamin D may not be enough and very high doses once per year may have adverse effects. It has been proposed that vitamin D supplementation increases the body’s demand of Vitamin K2, increasing the expression of vitamin K-dependent protein whose activation depends on Vitamin K2 action.

Thus, Vitamin D helps the body to adsorb calcium and is involved in its homeostatic regulation, but calcium cannot steer it away from the arteries and be driven to the bones without Vitamin K2, with potential risk of calcified plaques.

This hypothesis is circumstantially supported by the observation that animals deficient in vitamin K or vitamin K-dependent proteins exhibit remarkable similarities to animals fed toxic doses of vitamin D, and the observation that vitamin D and the vitamin K-inhibitor Warfarin have similar toxicity profiles and exert toxicity synergistically when combined. Vitamin D must work in combination with Vitamin K2 as MK-7, to keep calcium in the right places.

Having plenty of natural Vitamin K2 as MK-7 in the body enables us to profit from calcium and vitamin D like never before.1

---

**vitaMK7® is multi-benefit and multi-target**

Today almost all of us are deficient in Vitamin K2 due to the changes in our diets habits and modern food processing.

Symptoms of Vitamin K2 deficiency are so common and may be viewed as normal in industrial societies.

Last decade of studies has highlighted that Vitamin K2 as menaquinone-7 has a wide range of applications and benefits to humans at every stage of life.

- Children & teenagers
- Helps to build strong bones and teeth
- Women health
- Helps preventing osteoporosis
- Young people
- Middle aged people
- Helps to maintain heart healthy
- Elderly people

---

**A good vitamin K status is associated with healthy bone in children**

Children and adults above 40 years showed the largest tissue-specific vitamin deficiency and accordingly may benefit from Vitamin K2 supplementation.

Clinical observations have even revealed there are potential implications. Research shows children have 8-10 times more inactive osteocalcin, a marker indicating an unusual poor vitamin K status, than adults. Vitamin K-deficient children may also develop a risk for cardiovascular problems later in life. Researchers have also observed arterial calcification in children as young as five to six years of age.2,3

---

2. Theuwissen et al., Food Funct. 2014
3. Yamaguchi, Integrative Molecular Medicine 2014

---

These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.