

# Vitamin K and arterial calcification

No registrations found.

<b>Ethical review</b>	Not applicable
<b>Status</b>	Other
<b>Health condition type</b>	-
<b>Study type</b>	Interventional

## Summary

### ID

NL-OMON25255

### Source

Nationaal Trial Register

### Brief title

Vitacal

### Health condition

Vitamin K, menaquinone-7, arterial calcification, dp-ucMGP, diabetes patiënten, arterial stiffness, bone metabolism.

## Sponsors and support

**Primary sponsor:** UMC Utrecht

**Source(s) of monetary or material Support:** Dutch Heart Foundation

## Intervention

## Outcome measures

### Primary outcome

Arterial calcifications as quantified by <sup>18</sup>F-NaF PET/CT imaging.

### Secondary outcome

- Arterial calcification in other arteries than the femoral artery as quantified by <sup>18</sup>F-NaF PET/CT imaging.

- Bone metabolism in the lumbar spine, as quantified by <sup>18</sup>F-NaF PET/CT imaging.
- Arterial stiffness, as quantified by pulse wave velocity measurement.
- Dpuc-MGP, as quantified using a sandwich ELISA.

## Study description

### Study objective

We expect that supplementation with vitamin K will attenuated or reduce ongoing calcification and will significantly reduce dp-ucMGP in patients with type 2 diabetes.

### Intervention

vitamin K2 (menaquinone-7)

## Contacts

### Public

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## Eligibility criteria

## Inclusion criteria

- Middle aged men and women  $\geq 40$  years.
- Diagnosed with type 2 diabetes.
- At high risk of arterial calcification, based on an Ankle Brachial Index (ABI)  $<0.9$  or  $\geq 1.3$  or diagnosed PAD (prevalence is 24% in patients with type 2 diabetes (39)).
- Written informed consent

## Exclusion criteria

- Contra-indication for undergoing  $^{18}\text{F}$ -NaF PET/CT scan (pregnancy, breastfeeding, recent radiotherapy or chemotherapy).
- Subject underwent amputation.
- Not willing to give up blood donation during the study.
- Using vitamin K antagonists.
- Known coagulation problems (history of thrombosis).
- Using vitamin supplements that contain vitamin K, vitamin D or calcium.
- A mean vitamin K2 intake  $\geq 120 \mu\text{g/day}$  measured with a telephone questionnaire.
- Natto or goose liver consumers.

## Study design

### Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Double blinded (masking used)
Control:	Placebo

## Recruitment

NL  
Recruitment status: Other  
Start date (anticipated): 01-10-2015  
Enrollment: 0  
Type: Unknown

## Ethics review

Not applicable  
Application type: Not applicable

## Study registrations

### Followed up by the following (possibly more current) registration

ID: 45148  
Bron: ToetsingOnline  
Titel:

### Other (possibly less up-to-date) registrations in this register

No registrations found.

### In other registers

Register	ID
NTR-new	NL5147
NTR-old	NTR5287
CCMO	NL53572.041.15
OMON	NL-OMON45148

## Study results