



Publiceren: grondbeginselen en nieuwe ontwikkelingen  
Cock van Duijn

## 1e publicatie

### Micronutrients and the risk of lung cancer.

Kok FJ, van Duijn CM, Hofman A, Vermeeren R, de Bruijn AM, Valkenburg HA.

N Engl J Med. 1987;316(22):1416

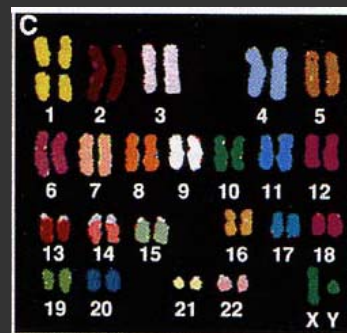
## 1e publicatie als eerste auteur

### Infant feeding and childhood cancer.

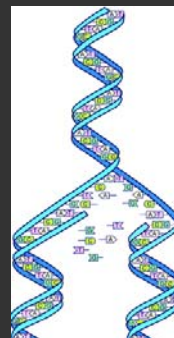
van Duijn CM, van Steensel-Moll HA, van der Does-vd Berg A, van Wering ER, van Zanen GE, Valkenburg HA, Rammeloo JA.

Lancet. 1988;(8614):796-7

## Mijn huidige werk



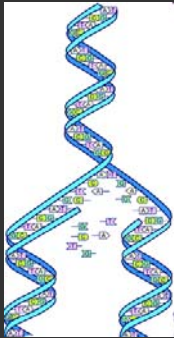
## Veranderingen in het DNA



```

AGGAGTCCAAAGCGGCGAGTG
CGCAGCGGCACCAGTCGTGA
CTCCAAAGCGATTGATAGCA
ACCCGATCCTATGAGGGCGCA
GGAGTCCAAAGCGGCGAGTGC
GCGAGAGGAGTCCGAGTCCG
GCAATTGCCAATGCCGATCG
AACGACGTAACCGACTTAGGC
CAGAGAGCTAGCGATCCGACT
CTAAGAGCAGCTAAAGACTCC
AAAGCGATTCCGATAGCAACCC
GCCGATCGAAGGAGTCCAAAG
  
```

## Veranderingen in het DNA



AGGAGTCCAAGCGCGCAGTG  
 CGCAGCGCGCACCAGTCGTGA  
 CTCAAAGCGATTGATAGCA  
 ACCCGATCCTATGAGGGCGCA  
 GGAGTCCAAGCGCGCAGTGC  
 GCGAGAGGAGTGGAGTCCG  
 GCAATTGCCAATGCCGATCA  
 AACGACGTAACCGACTTAGGC  
 CAGAGAGCTAGCGATCCGACT  
 CTAAGAGCAGCTAAAGACTCC  
 AAAGCGATTGATAGCAACCC  
 GCCGATCGAAGGAGTCCAAAG

## Genen en kenmerken



## Mijn huidige werk

Genetic variaties ⇒ Risico op ziekte



## Beginsel 1: vind de niche

Science, Vol 261, Issue 5123, 921-923  
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ARTICLES

**Gene dose of apolipoprotein E type 4 allele and risk of Alzheimer disease in late onset families**  
 EH Carder, JM Saunders, WJ Strittmatter, DE Schmechel, PC McGehee, M Pericak-Vance, et al.

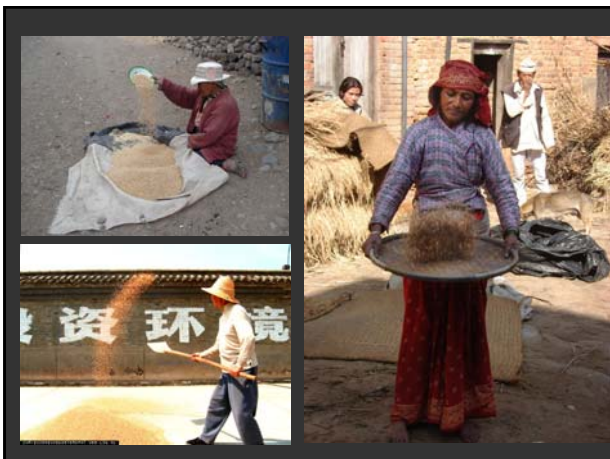
Department of Medicine, Joseph and Kathleen Bryan Alzheimer's Disease Center, Durham, NC 27710

The apolipoprotein E type 4 allele (APOE-epsilon 4) is genetically associated with the late onset sporadic form of Alzheimer's disease (AD). Risk for AD increases with increasing number of APOE-epsilon 4 alleles. Thus APOE-epsilon 4 gene dose is a major risk factor for late onset AD. APOE-epsilon 4 was virtually sufficient to cause AD by age 80.

**Apolipoprotein E4 allele in a population-based study of early-onset Alzheimer's disease**  
 Cornelia M. van Duijn, Peter de Koziff, Marc Cruts, Anita Willemse, Lonneke M. Heisterkamp, Albert Hofman, & Christine Van Broeckhoven

Several studies have reported an association of the apolipoprotein E epsilon 4 (APOE4) to familial and sporadic late-onset Alzheimer's disease (LOAD). Here we report on the relationship between APOE4 and early-onset Alzheimer's disease (EOAD) in a Dutch population-based study. The frequency of the APOE4 allele was 2.3 times higher among EOAD cases compared to controls. Among patients, the allele frequency was 1.6 times higher in those with a positive family history than in those without. A significant increase in risk of EOAD was found for subjects homozygous for APOE4 regardless of family history of dementia, but an increase in EOAD risk for APOE4 heterozygotes could only be shown in subjects with a positive family history. Our study demonstrates a significant association between APOE4 and EOAD which is modified by family history of dementia.

Alzheimer's disease (AD) is a neurodegenerative disorder characterized by neuronal loss and the presence of amyloid plaques and neurofibrillary tangles. The epsilon 4 allele of the apolipoprotein E (APOE) gene is associated with an increased risk of AD. The epsilon 4 allele is also associated with an increased risk of EOAD. The epsilon 4 allele is also associated with an increased risk of EOAD in subjects with a positive family history of dementia.



## Grondbeginsel 2:

- Iedere paper is een mega effort (geld en tijd)
- Investeer maximaal (tijd, geld en menskracht) in belangrijke bevindingen
- Blijf niet "zoeken" naar een doorbraak in een doodlopende straat

### Beginnel 3: je redt het niet alleen



### Top publiceren is team work



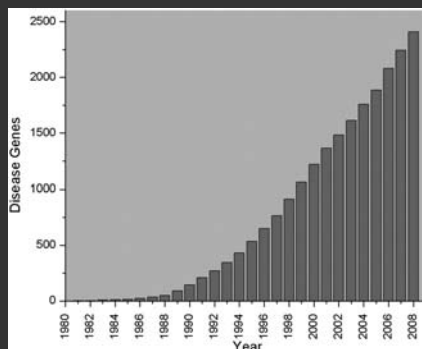
### Beginnel 4: blij je ontwikkelen



### Genetische Epidemiologie

- Van familie onderzoek naar populatie onderzoek
- Van 3 patiënten naar 120,000
- Van complexe statistiek tot simpele t-test

### Genen en kenmerken



### Nieuwe ontwikkelingen

- Publiceren met 100en auteurs
- Publicaties bij gen-ontdekkingen vrijwel altijd in toptijdschriften
- Belangrijk: waar sta je op de paper?

