Nutrition & chronic diseases

Science for impact: applying insights on nutrition in healthcare



The Netherlands, 17 million people, 2018.



Increasing number of years chronically ill 8 million people have one or more chronic diseases

49% is overweight

14% is obese or morbidly obese



Research

We study the role of nutrition, body compostion and lifestyle factors in the aetiology of cardiovascular diseases, diabetes mellitus and cancer by means of epidemiological studies and randomized trials, underpinned with research on pathophysiological mechanisms.



Healthcare

Care for patients with chronic ilness is complex and needs to be supported by a systematic approach to self-management and multidisciplinairy teamwork. We have leading experience in e-health and integration of optimal nutrition and exercise in e-health.



Cancer

Improve health during and after cancer treatment by promoting a healthy diet and physical activity.



Dietary intake, nutritional status, dietary supplements, vitamin D, physical activity, body composition.

COLON STUDY - more than 2000 colorectal cancer patients included.



Centre of expertise in oncological care through collaboration between Gelderse Vallei Hospital, Rijnstate Hospital, Slingeland Hospital and Wageningen University & Research.

Cardiovascular disease

Nutrition in relation to coronary heart disease, stroke and type 2 diabetes.



Minerals, salt, fatty acids, protein, polyphenols, dairy products, plant foods, and dietary patterns.

Alpha Omega Trial on n-3 fatty acids and cardiovascular diseases.



Cardiovascular diseases are the leading cause of death in Western societies, and strongly increasing in low- and middle-income countries.

The burden of cardiovascular diseases is largely preventable by a healthy diet and lifestyle.





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Disease aetiology and prevention

Clinical care and disease prognosis

Exposure assessment and data-<u>analysis</u> Translating evidence to the clinic and community

Example of excellence: E-Health

- Integration of food intake monitor (Eetscore) into e-health to support people with chronic diseases to eat healthier.
- Improved medical care: e-health programs for 32 diseases



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 of physical functioning: prospective cohort study. BMC Cancer (2017).
- Gijsbers et al. Effects of sodium and potassium supplementation on blood pressure and arterial stiffness: a fully controlled dietary intervention study. Journal of Human Hypertension (2015).
- Kromhout D, Gitay EJ, Geleijnse JM for the Alpha Omega Trial Group. N–3 fatty acids and cardiovascular events after myocardial infarction. New England Journal of Medicine (2010).

