



NUTRIGENOMICS  
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# OPEN SEMINAR

22 March 2024  
10:00 AM

INSTITUTE OF ANIMAL REPRODUCTION AND FOOD RESEARCH PAS  
TUWIMA 10 ST., 10-747 OLSZTYN



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## DIET:MICROBE INTERACTIONS IN THE GUT

- reducing the risk of metabolic disease

This presentation will describe how different dietary factors, probiotics, prebiotics and plant polyphenols can modulate metabolic disease risk in humans, and go on to present how a whole diet, enriched with plant polyphenols can improve markers of obesity, metabolic disease and healthy ageing. The DIRECT-PLUS study, a large long-term well powered and controlled dietary intervention showed that a "Green" Mediterranean style diet, with increased plant foods, high plant polyphenols and reduced meat intake, could reduce obesity, reduce diabetes risk, improve whole body and liver fat distribution, reduce brain atrophy, stress and cardiovascular disease risk. (...) Taken together these data are providing the first direct evidence in humans that dietary modulation of cardiometabolic health is mediated through the gut microbiota, and support further studies for designing efficacious dietary modulatory tools and whole diets based on increased fibre, polyphenols and live microorganisms.



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