PRESS RELEASE

**Hans Adolf Krebs Prize Awarded to Yanislava Karusheva, MD**

**The Hans Adolf Krebs Prize was awarded for the 13th time by the German Nutrition Society. This year's prize winner is Yanislava Karusheva, MD, for her study on the influence of branched-chain amino acids on glucose metabolism in type 2 diabetes.**

**Düsseldorf (DDZ) –** Since 1981, the German Nutrition Society (DGE) has awarded the Hans Adolf Krebs Prize every four years for innovative, outstanding scientific achievements in nutrition research. The award-winning research papers address issues in nutrition and food science, as well as their nutritional and physiological significance, and demonstrate original methods in terms of approach and study design. The Hans Adolf Krebs Prize, endowed with 5,000 euros, was awarded this year to Yanislava Karusheva, MD from the Institute for Clinical Diabetology of the German Diabetes Center (DDZ) for her clinical-experimental study on "Short-term dietary reduction of branched-chain amino acids reduces meal-induced insulin secretion and modifies microbiome composition in type 2 diabetes: a randomized controlled crossover trial". "This award is not only a recognition of the relevance of this project, but also in particular a recognition of the promotion of our young researchers," said Professor Michael Roden, scientific director and board member of the DDZ. "The work of Dr. Karusheva helps to better understand the effect of specific foods and may serve as a basis for new studies on lifestyle changes as an approach for more precise diabetes treatment in the future.”

Within the framework of her award-winning study, Dr. Karusheva conducted clinical and experimental investigations on the influence of branched-chain amino acids on glucose metabolism in type 2 diabetes. The aim was to elucidate the effect of a four-week dietary intervention (change in intake of branched-chain amino acids) on insulin sensitivity and insulin secretion – taking into account the composition of the gut microbiome – in people with type 2 diabetes. The results of the intervention showed that the reduction of branched-chain amino acids in the food led to an increase of insulin action. However, after meals, the reduction led to a decrease of insulin secretion. Furthermore, after only seven days, the function of the mitochondria, the power plants of the adipose cells, improved in the adipose tissue.

The study had previously been awarded a project grant by the German Diabetes Association in 2018 and appeared in the American Journal of Clinical Nutrition. The award ceremony took place digitally during the 58th Scientific DGE Congress on February 17, 2021. After introductory words by the Vice President of the DGE, Professor Bernhard Watzl, Dr. Karusheva thanked her team in her speech for their support over the years and presented the main results of her work.

**Original Publication:**

Karusheva Y, Koessler T, Strassburger K, Markgraf D, Mastrototaro L, Jelenik T, Simon MC, Pesta D, Zaharia OP, Bódis K, Bärenz F, Schmoll D, Wolkersdorfer M, Tura A, Pacini G, Burkart V, Müssig K, Szendroedi J, Roden M. [Short-term dietary reduction of branched-chain amino acids reduces meal-induced insulin secretion and modifies microbiome composition in type 2 diabetes: a randomized controlled crossover trial.](https://pubmed.ncbi.nlm.nih.gov/31667519/) Am J Clin Nutr. 2019;110(5):1098-1107. doi: 10.1093/ajcn/nqz191.

The German Diabetes Center (DDZ) is a German reference center for diabetes. Its objective is to contribute to the prevention, early detection, diagnosis and treatment of diabetes mellitus. At the same time, the research center aims at improving the epidemiological data situation in Germany. DDZ is in charge of the multicenter German Diabetes Study and serves as point of contact for all players in the health sector. In addition, it prepares scientific information on diabetes mellitus and makes it available to the public. DDZ is part of the Leibniz Association (Wissenschaftsgemeinschaft Gottfried Wilhelm Leibniz, WGL) and is a partner of the German Center for Diabetes Research (DZD).

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