# **DATA & BIBLIOGRAPHY**

## 20 years of scientific studies that prove the

### benefits of Lysulin's ingredients

#### **Power of Medical Nutrition Therapy in Diabetes**

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- **3.** Diabetes Care (2019) 42, 727-730. Nutritional Strategies for Prevention and Management of Diabetes: Concensus and Uncertainties.

#### Lysine Lowers Glucose and Glycated Proteins

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- <u>Acta medica Iranica</u> 2016 54: 24-31. "The findings...provide convincing evidence on the usefulness of lysine supplementation as a new adjunct therapy for diabetes." Available from: <u>http://acta.tums.ac.ir/index.php/acta/article/view/5385</u>
- <u>Diabetes/metabolism research and reviews</u> 2008 24 (1) 64-73."RESULTS: We found that L-Lysine therapy prevented diabetic- induced increases in Glucose, AGE, HbA(1c), triglyceride, total- and LDL- cholesterol." Available from: <u>https://doi.org/10.1002/dmrr.769</u>
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- 6. Exp. Eye Res. (1998) 67, 597-601. While the blood sugar levels remain high in the diabetic controls, there was a phenomenal reduction of blood sugar levels in lysine or amino acids-fed groups. Lysine in particular has the prospect of therapeutic value in the control of diabetes. Normal levels of glycosylated hemoglobin in groups III and IV confirm diabetic control by lysine. The mechanism may be mostly through scavenging of glucose by amino acids. All the diabetic rats developed cataract (Fig. 1) at the end of 70-90 days. Interestingly, four out of six in group IV receiving lysine alone or amino acids orally did not develop cataract. Dietary intake a mixture of essential amino acids, chiefly lysine, may ward off or delay cataract formation.Available from: <u>https://doi.org/10.1006/exer.1998.0547</u>
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# Zinc Lowers Glucose and Glycated Proteins and Improves the Lipid Profile.

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- 16. J Diabetes 2017 "Zinc supplementation reduced blood glucose and insulin resistance, while improving β-cell function. Furthermore, disease progression to diabetes was reduced and beneficial effects of supplementation were also noted on total and LDL cholesterol." Available from: <u>https://doi.org/10.1111/1753-0407.12621</u>
- 17. Journal of Diabetes (2017) doi: 10.1111/jdb.12621. Usage of Zinc in pre-diabetes: A clinical trial. 200 patients with prediabetes studied in a double-blind study. "The FPG, OGTT, total and LDL cholesterol were significantly reduced in the Zinc group, with significant improvement in β-cell function." LDL dropped by 28% and beta cell function improved by 57%. In a 2 year follow up, fewer patients on zinc went on to develop Type 2 diabetes; 11% on zinc versus 25% in control group. Available from: https://doi.org/10.1111/1753-0407.12621
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randomized controlled trials. "Our analysis revealed that several key glycemic indicators are significantly reduced by zinc supplementation, particularly the FG in subjects with diabetes and in subjects who received an inorganic zinc supplement. Together, these findings support the notion that zinc supplementation may have clinical potential as an adjunct therapy for preventing or managing diabetes."

#### Vitamin C Lowers Glucose and HbA1c

- <u>Advances in Pharmacological Sciences Volume</u> (2011), Article ID 195271, doi:10.1155/2011/195271 "The absence of any substantial side effects, cheaper cost, improvement in FBS, PPBS, and HBA1c, and the fact that plasma ascorbic acid levels are decreased in DM and increased after oral supplementation make it a particularly attractive therapeutic adjuvant in the treatment of type 2 DM."Available from: <u>https://doi.org/10.1155/2011/195271</u>
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#### Glycated Proteins are the Cause of Many Disease Complications.

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#### **HbA1c Publications**

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