

Ocufolin[®] for Diabetic Retinopathy (DR)

Dosage: one capsule per day containing 900 µg L-methylfolate and other micronutrients

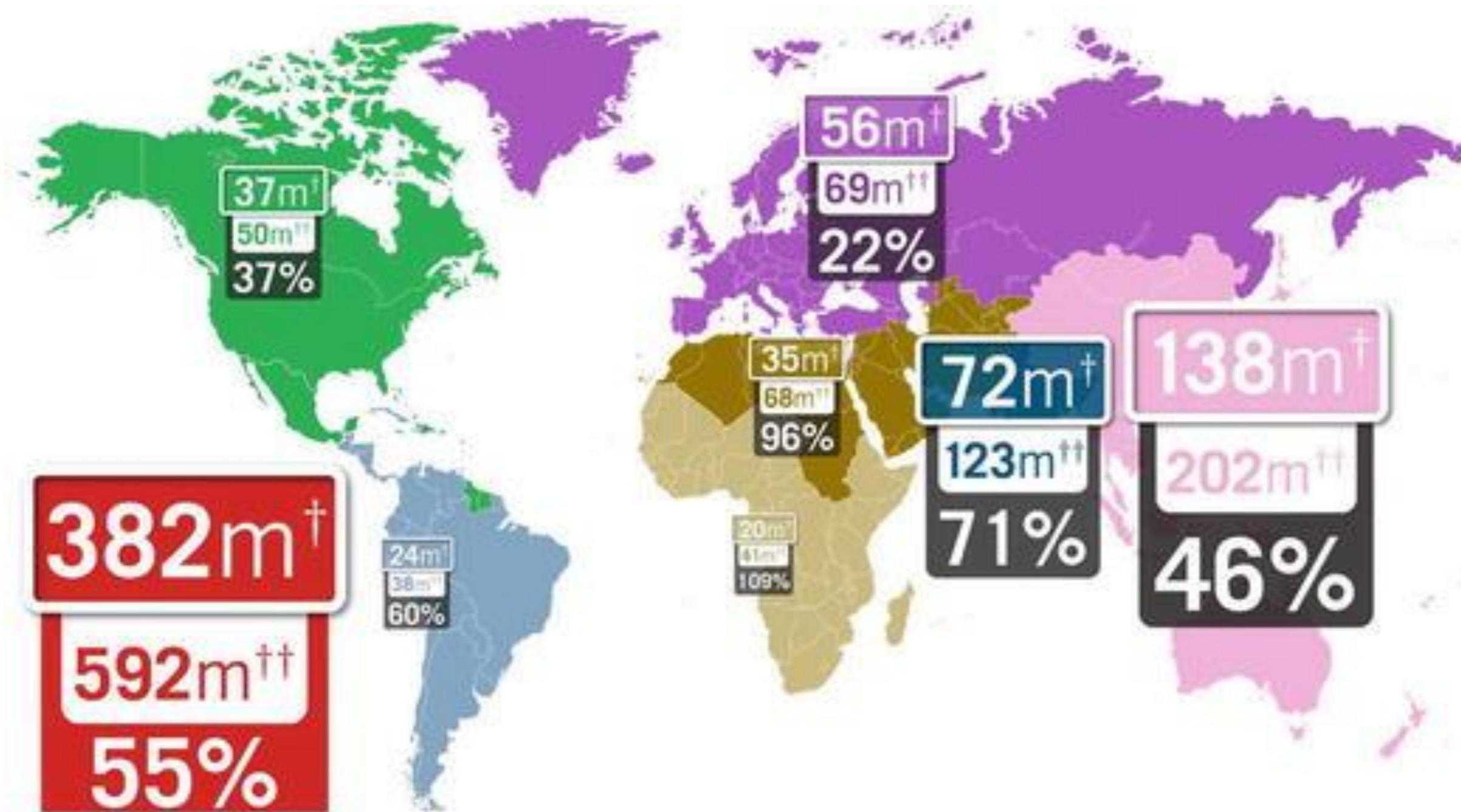
Martin Ulmann / Gerd Wiesler

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Aprofol AG

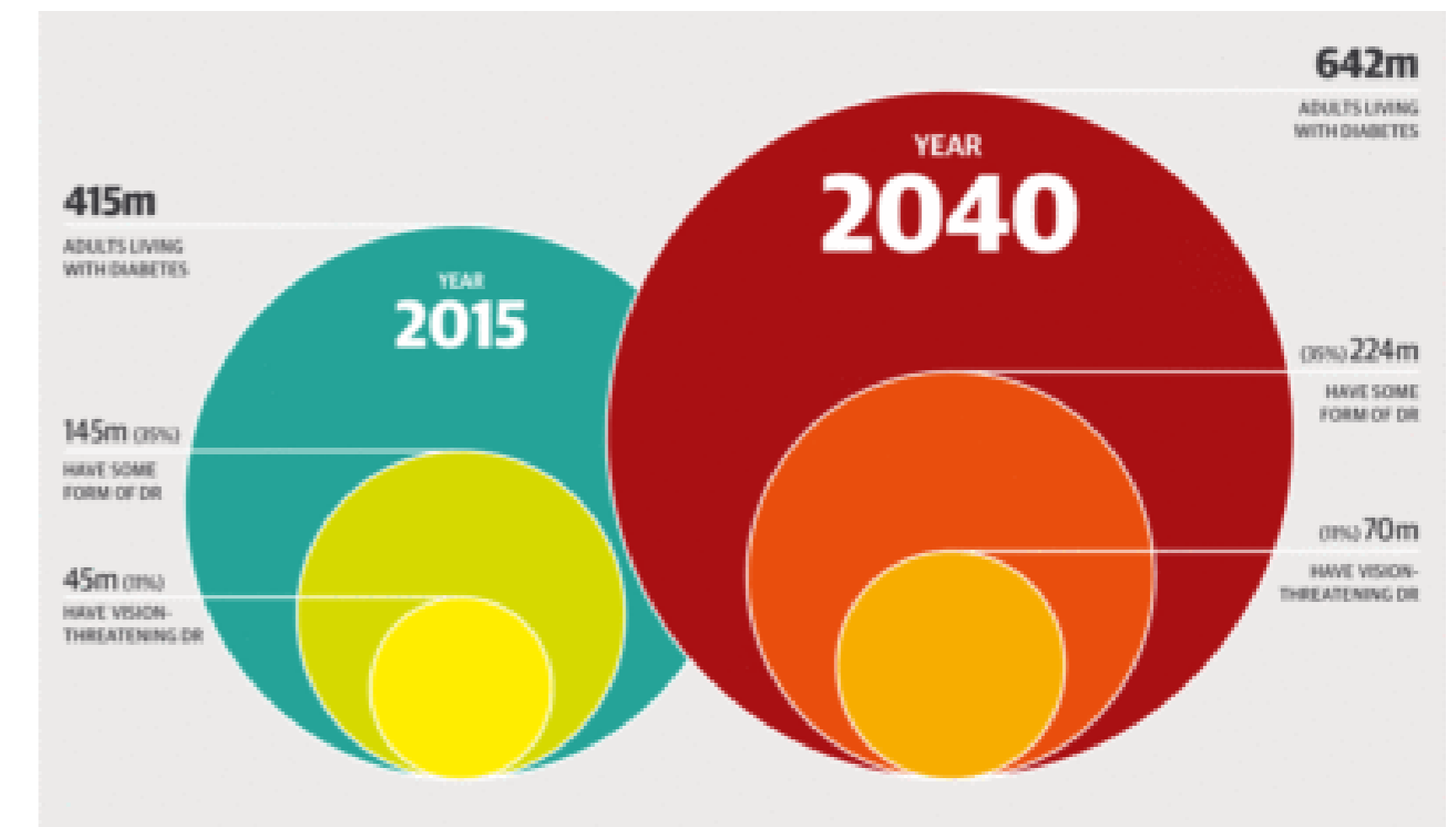
Diabetes has nearly quadrupled since 1980

...and is one major cause of blindness and vision impairment



† Prevalence in 2013 (millions)
 †† Projected prevalence in 2035 (millions)
 Projected increase from 2013 to 2035 (%)

International Diabetes Federation..
 IDF Diabetes Atlas: 6th Edition, 2013



Diabetic retinopathy (DR) is an important cause of blindness and occurs as a result of long-term accumulated damage to the small blood vessels in the retina.

The War on Diabetic Retinopathy (DR)



Where are we now, and in future

Impact

- Major cause of blindness in working-age adults, in particular in low and middle income countries (LMIC)
- 425 millions adults with diabetes (worldwide) rising to 629 millions by 2045
- In addition: 352 millions with prediabetes
- Global prevalence 8.8 %, in Asia even higher
- One third of those with diabetes have DR, 1 in 10 vision-threatening
- USD 727 billions health care spending



Treatment (=> repair a damage or avoid a damage?)

- Now focused on the tertiary, vision-threatening stage: laser, anti-VEGF injections and surgery
- Future: in addition, focus on early stage and prevention
- Improving self-care behaviour
- More effective diabetes management
- Improving awareness for DR
- Improving screening with telemedicine and artificial intelligence (AI)

Supported by:



A local and systemic deficiency of micronutrients?

Prof. Garhöfer / Schmidl, Vienna => hypothesis confirmed



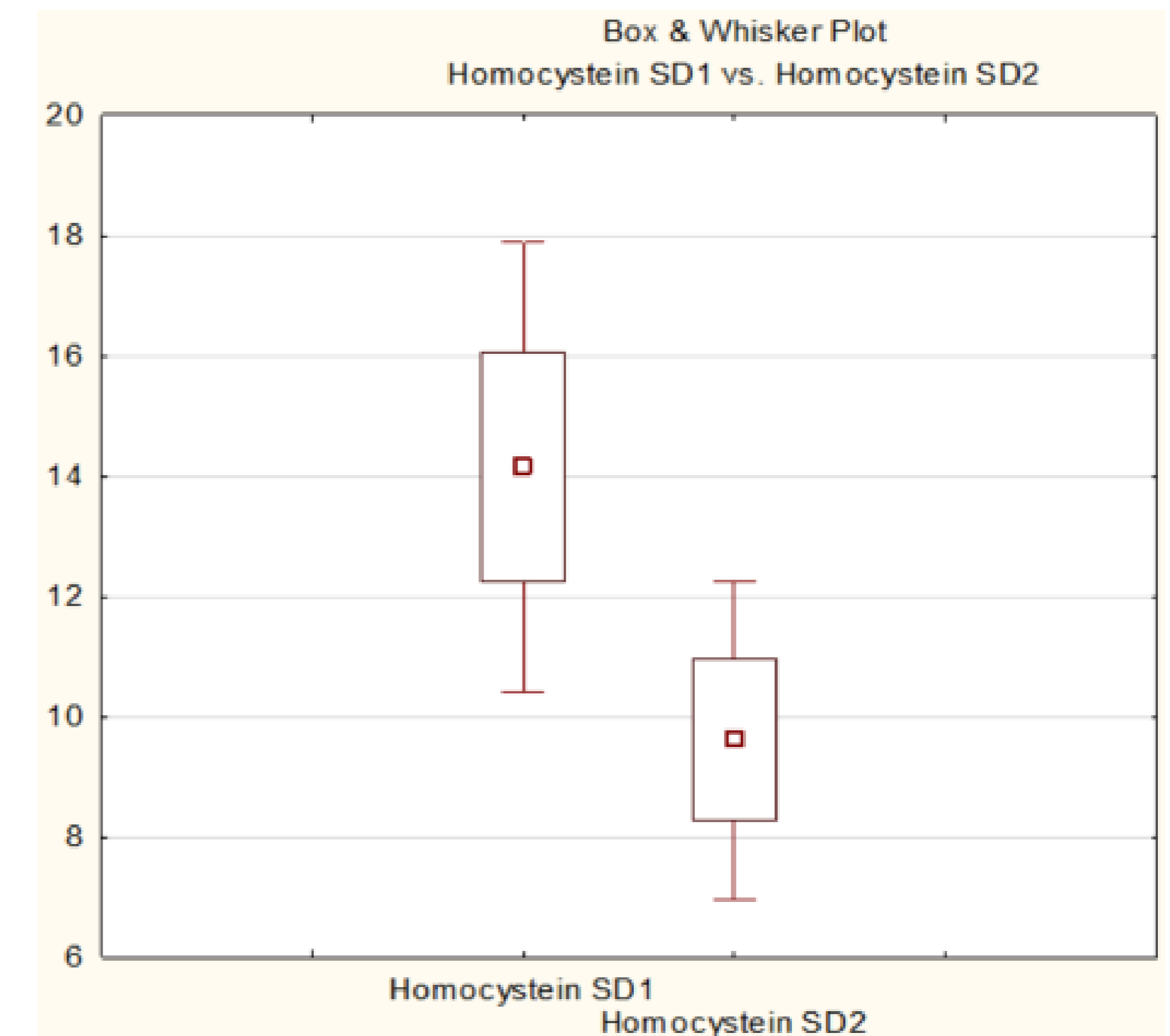
24 patients - 12 weeks - one capsule Ocufofin[®] per day

Diabetic patients with early / moderate diabetic retinopathy

- Plasma **homocysteine** levels decreased from 14.2 ± 9.3 (SD1) to 9.6 ± 6.6 $\mu\text{mol/L}$ (primary end point, $p < 0.001$; => significant)
- Total retinal blood flow increased 36.8 ± 12.9 to 39.2 ± 10.8 $\mu\text{l/min}$ ($p = 0.11$; => strong trend)
- Reduction of the intraocular pressure from 14.8 ± 3.0 to 13.4 ± 2.2 mmHg ($p = 0.02$; => significant)

SD = study day

Source: Schmidl D., Mol. Vis., 26, (2020), 326.



Nutritional Therapy for DR and Age-related Macular Degeneration

Improvement of microcirculation and uptake via Blood-Retina-Barrier (BRB)



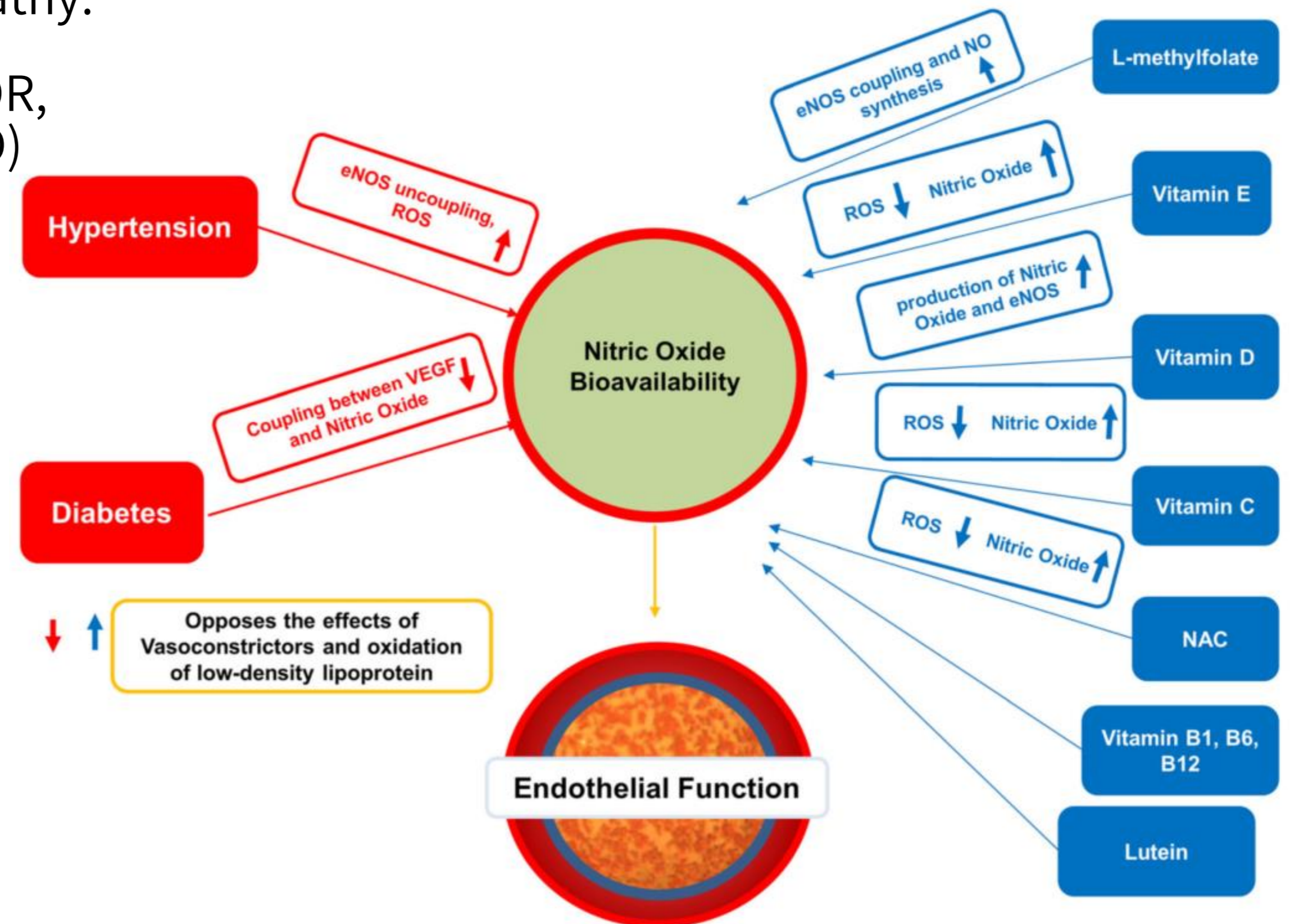
Diabetic Retinopathy (DR) is a form of microangiopathy.

An elevated Homocysteine-level is a risk factor for DR, but also for age-related macular degeneration (AMD) and glaucoma.

Increased homocysteine levels and oxidative stress increases microvascular damage.

Patients with degenerative eye diseases have high incidences of deficiencies of crucial vitamins, minerals and related compounds.

Optimal combination of B-vitamins, antioxidants and minerals in Ocufofin® complements conventional treatments.



Shi et al., Eye and Vision, 7(2020)33, Bascom Palmer Eye Institute, USA



Further Information

Please find additional information on Ocufofin[®] and the scientific background on:

<https://ocufolin.shop/en/specialist-portal/publications-ocufolin>

For further information please visit

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