

FP()

(Red blood cells production, results is: †arterial blood oxygen carrying capacity)

(Vasodilation, neovascularisation results is: \$\peripheral resistance. resting heart rate, blood pressure)

Nitric oxide (NO) up-regulation. Results in: Vasorelaxation, neurotransmission and cytotoxicity **†SOD, CAT**

Certain enzymes - antioxidants. Results in: † antioxidant system capacity, Joxidative stress.

Glossary:

HIF-1 α is a nuclear protein that activates gene transcription in response to reduced cellular O₂ concentration. HIF-1 activates the transcription of EPO, VEGF, iNOS, heme oxygenase 1 and several other critical intracellular responses to hypoxia.

HSP70 A major stress-inducible heat shock protein (HSP70) which plays an important role in protecting cells from deleterious stresses.

EPO - Erythropoetin. A glucoprotein hormone produced by the kidney that promotes the formation of red blood cells in the bone marrow.

VEGF - Vascular Endothelial Growth Factor.

iNOS - Nitric oxide (NO) is an inorganic, gaseous free radical that carries a variety of messages between cells. Vasorelaxation, neurotransmission and cytotoxicity can all be potentiated through cellular response to NO.

NO production is mediated by members of the nitric oxide synthase (NOS) family.

SOD - Super Oxide Dismutase. Enzyme (protein) antioxidant.

CAT - Catalase. Enzyme (protein) antioxidant.