Propositions

1. Despite the widespread belief that dietary supplements might be good for one’s health, certain popular anti-oxidants may impair the health benefits of exercise-induced oxidative stress (*this dissertation*).

2. Supplemental oxygen does not improve the post-exercise recovery time in healthy humans, however it still may in patients with cardiometabolic syndrome (*this dissertation*).

3. High-quality skeletal muscle mass accompanied by low-quantities of body fat are an Old Man’s Best Friends (*this dissertation*).

4. Reduction of sitting time shapes the buttocks and may lower the likelihood of the metabolic syndrome and disability while aging (*this dissertation*).

5. Heart rate variability assessment during exercise may be an appropriate alternative to costly and time-consuming spiro-ergometry testing (*this dissertation*).

6. Aging is not a disease.

7. Decreasing levels of pathology through a healthy life-style seems one of the most promising strategies to age longer while decreasing the risk of early disability.

8. A daily session of moderate intensity physical activity appears insufficient to compensate for sedentary behavior throughout the rest of the day.

9. The combination of endurance and resistance type of exercise training is probably the best available medicine for healthy aging.

10. The research on aging aims more for the improved life quality than the extended life span.

11. A Polish saying states that if you cannot enter a house through a door, then find your way around through a window. Analogous to solving scientific problems, this is not about burglary, but about finding alternative ways.