STELLINGEN behorende bij het proefschrift PROPOSITIONS associated with the thesis

NUTRITION, IMMUNITY, INFECTION AND METABOLIC HEALTH IN ECUADOR

 Zinc supplementation in children with low height-for-age Z score improves their DTH response and reduces the incidence of respiratory infections. The benefit reverses when the supplementation is stopped. This thesis

 Zinc supplements as an adjunct to the standard treatment does not have an effect on the clinical evolution of severe pneumonia in children. This thesis

3. Children with a better zinc status resolve severe pneumonia faster.

This thesis

 Metabolic syndrome (MetS) is highly prevalent in older Ecuadorian subjects, mainly in women.

This thesis

 MetS is associated with vitamin C and vitamin E deficiency, but not with zinc deficiency, in older Ecuadorian subjects.
 This thesis

6. The hypothalamic dysregulation of energy balance by overnutrition involves a neuron-specific, non-cytokine program through IKKβ/NF-κB. *Zhang, X., et al. Cell 2008; 135: 61–73*

7. IL-6 has a homeostatic role in limiting obesity-associated insulin resistance and inflammation and defines a novel mechanism in the control of macrophage polarization.

Mauer J., et al. Nat Immunol. 2014; 15: 423-430

 Major Histocompatibility Complex class II molecules are highly expressed on large adipocytes, this expression being linked to activation of the JNK-STAT1 pathway.

Xiao L., et al. International Journal of Obesity 2015; doi: 10.1038/ijo.2015.145

 Elderly women from low-income areas of Quito with a high BMI and waist circumference have higher serum hepcidin and CRP levels as compared to their lean counterparts.

Dao MC et al, FASEB J. 2011; 779.1-xxx.

10. Adipose iNKT cells have an anti-inflammatory action on the function of macrophages.

Lynch L., et al. Nat Immunol. 2015; 16: 85-95. doi:10.1038/ni.3047

11. Brevity is the soul of wit. Shakespeare, Hamlet

> Fernando Sempértegui Ontaneda Rotterdam, 7 oktober 2015