Reviewer’s report

Title: Is Impaired Energy Regulation the first order of the Metabolic Syndrome in ethnically diverse populations in the USA and Taiwan?

Version: 2 Date: 27 January 2010

Reviewer: Carlo Maria Rotella

Reviewer’s report:

This article explores the existence of a central element in metabolic syndrome that could explain the multiple metabolic impairments and the cardiovascular diseases risk related. The employ of factor analysis in the metabolic syndrome has been largely used in several studies, however the manuscript shows an analysis in various ethnic groups.

Although the paper does not contain original statements (the cluster of fasting plasma glucose, triglycerides and excess visceral adiposity are well known as a part of insulin resistance syndrome), however, the article addresses an important point unifying different aspect of insulin resistance in a cluster well identified. It is better for the authors clarify in the text some points:

Minor Essential Revisions
1) Since the insulin resistance data are not present through the manuscript, why the authors did not use other surrogates (such as triglycerides-HDL ratio) to better identify the cluster groups?
2) Table 1:
   all the parameters considered must have the relative unit (lipids in mg/dl, blood pressure in mmHg and so on). Please correct glucose g/dl on mg/dl.
3) Table 2:
   in the footnotes insert the NCEP criteria for waist circumference.
4) In the text has been used the abbreviations for metabolic syndrome MS or MetS: please choose one.

Discretionary revision

Title: Is Impaired Energy Regulation the core of the Metabolic Syndrome in various ethnic groups of USA and Taiwan?

Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.