

Energy expenditure and intake comparisons in Chilean children 4-5 years attending day-care centres Comparación entre el gasto y el consumo de energía en niños Chilenos de 4-5 años asistentes a jardines infantiles

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© 2015 Grupo Aula Medica S.A. All rights reserved. Introduction: the doubly labelled water (DLW) method has an accuracy of 1% and within-subject precision of 5-8%, depending on subject's age and environments issues. Energy intake assessment is prone to errors (>15-20%) depending in the method utilized. Objective: to quantify DLW methodology errors in four to five year olds that could affect the comparison with energy intake. Methods: energy expenditure (TEE, by DLW), was assessed during 14 days in 18 preschool children, who attended eight hours daily to day-care centres. Energy intake was determined by a combined method: food weighing during weekdays and recall after leaving the Centre (17h to sleep time) plus 24 h recall, during the weekend. Several assumptions affecting DLW total error were assessed to determine their influence in the comparison to energy intake (i.e. background variability, space ratio, proportion of water subject to fractionation, food quotient value). Results: the