Improving oral health or changing food texture: the challenge for persons with neuromotor disabilities

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In people with neuromotor disabilities, swallowing, chewing and dental disease are usually evaluated separately, despite the fact that the development and maturation of these oral conditions are strongly linked. For the general population, it has been shown that dental and general health are related to chewing, that masticatory performance is a prime factor associated with nutritional intake and that poor chewing performance is associated with a preference for the taste and texture of soft foods. Moreover, craniofacial development depends on muscular activity during mastication, which affects in turn swallowing and respiration. Despite the wide description of orofacial problems, their potential impact on the prevalence of dysphagia in individuals with neuromotor disabilities, we have very little understanding of the evolution and interaction of all these problems within this population. Food refusals and food selection in persons with neuromotor disabilities are often interpretated as resulting from mental deficiencies and behavioural problems rather than physiological ones. Rejection of the taste and texture of hard foods results in a diet that is low in fibre, and high in fatty acids and cholesterol. However, persons with neuromotor disabilities are prone to cardiac disease, gastrointestinal disease symptoms, and malnutrition and the risk of nutritional problems increases and aggravates general health. Evaluation of the oral conditions of persons with neuro motor disabilities are thus of utmost importance and should be examined using a multidisciplinary approach. This presentation will give some keys aiming to improve food oral processing throughout life of persons with neuromotor disabilities.